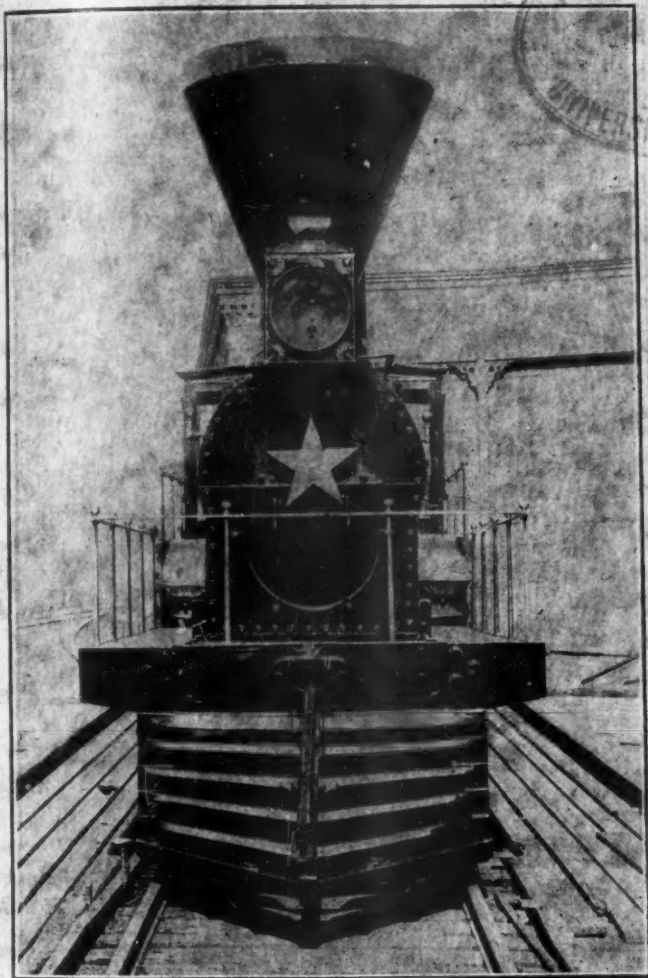


BULLETIN No. 5



THE RAILWAY AND LOCOMOTIVE
HISTORICAL SOCIETY



THE RAILWAY
AND LOCOMOTIVE HISTORICAL
SOCIETY



Copyright, 1923.

Thirty Years of Transportation.



N. Y. C. #999 BREAKING THE RECORD AT $112\frac{1}{2}$ MILES AN HOUR.
MAY 10, 1893



THE MODERN "EMPIRE STATE EXPRESS".
MAY 10, 1923

The Railway & Locomotive Historical Society.

COMMITTEE IN CHARGE OF PUBLICATION.

CHAS. E. FISHER, *Editor*,
#152 Harvard St., Brookline, Mass.

J. W. MERRILL,
#40 Kilby St., Boston, Mass.

HERBERT FISHER,
Box #426, Taunton, Mass.

Copies of this Bulletin may be procured from either Mr. Herbert Fisher or Mr. J. W. Merrill.

This is the Fifth Bulletin to be presented to our members and to those interested in the work of this Society. It is with considerable pleasure that we print the article and reproduce the photographs furnished by Mr. Joslyn as the history of the early railroads of California is exceedingly interesting and his photographs are in a class by themselves. The story of the "Commonwealth" is somewhat of a departure from our previous articles, but it is of such interest both as to names and localities in and around Boston, that the Committee feels justified in reproducing it.

A leaflet containing the revised charter and by-laws has been mailed to each member. The changes made were in accordance with the new offices created at the Second Annual Meeting of the Directors of this Society. The appointment of Mr. Bishop as our English Representative has been fully justified in the interest displayed by our fellow countrymen in this Society. Mr. Bishop is an enthusiastic student in early railway and locomotive history and he will gladly assist any of our members who desire information on the early English railways or locomotives.

The Committee takes pleasure in reproducing the introduction to Mr. Kimball's lecture delivered during the exhibition held by this Society at the Boston Public Library. The slides that followed during this lecture were indeed more than of ordinary interest.

The Committee will welcome any further queries for the Question Box and they wish our members to feel that contributions are always welcome. We hope that this bulletin will have the same interest as our previous numbers and wish to express our appreciation for those who have co-operated with us.

The Railway & Locomotive Historical Society.

CHAS. E. FISHER, *President*,
#152 Harvard St., Suite #8, Brookline (46), Mass.

HERBERT FISHER, *Vice President*,
Box #426, Taunton, Mass.

J. W. MERRILL, *New England Vice President*,
#40 Kilby St., Boston, Mass.

C. W. PHILLIPS, *Recording Secretary*,
#30 White St., Taunton, Mass.

R. W. CARLSON, *Corresponding Secretary*,
Escanaba, Mich.

A. A. LOOMIS, JR., *Treasurer*,
#60 Third Ave., Berea, Ohio.

WARREN JACOBS, *Director*,
Ticket Office, South Station, Boston, Mass.

W. O. MOODY, *Director*,
#4830 North Monticello St., Chicago, Ill.

BENJ. THOMAS, *Director*,
#5 Prospect Ave., Nashua, N. H.

C. L. WINEY, *Director*,
#17 East 42nd St., New York, N. Y.

E. R. CLARK, *Director*,
Chelmsford, Mass.

G. W. BISHOP, *English Representative*,
#57 Warwick Road, Kenilworth, England.

Delaware & Hudson Co. Celebrates 100th Anniversary.

The Delaware & Hudson Co., one of the pioneer roads of America, recently celebrated the one hundredth anniversary of the granting of its charter, April 23rd, 1823. Would that we could turn the pages of history back nearly one hundred years and witness the trial of the old "Lion". The celebration of 1923 was far different than that of Aug. 8, 1829, when Horatio Allen first guided the "Lion" over the hemlock rails. The "Lion" is reproduced elsewhere, in connection with Mr. Bishop's contribution and the original was received from the D. & H. Co., which this Society wishes to acknowledge with thanks. The early account of the opening of that road was reviewed recently in the Boston Herald and is so good that it is worthy of reproduction here.

The D. & H. was once the Delaware & Hudson Canal Company's railroad. "Chartered in 1823 under the laws of the state of New York," it did not long remain only a canal. In 1828 the company began the construction of a railroad from its coal mines to Honesdale, which was the terminus of its canal. This is held to have been the third practical railroad in the country and to have been part of the great plan of two Philadelphia Quakers to connect the mines they had found in the valley of the Lackawanna with tidewater on the Hudson. The railway was to fill a gap of 17 miles. It was a gravity road, one of several which makes a picturesque part of the history of Pennsylvania. Owing to the hilly nature of the region it traversed, it was built with eight inclined planes varying in length from one mile to four. When passenger cars were placed on it in 1877 it became a tourists' wonder, popular for the exhilaration of its ride and the beauty of its scenery.

On the tracks of this line, however, a locomotive was first run in America. Horatio Allen, a young American engineer, under commission of the Canal Company, ordered four locomotives from England, three from the works of a firm at Stourbridge, and a fourth which was built by Stephenson. The first of the four arrived in New York in January, 1829. It was shipped from the foot of Beach street up the Hudson to Rondout and then by canal to Honesdale. It was of primitive "grasshopper" style, and some imaginative workman having painted a lion's head on the front of its boiler it was dubbed the "Stourbridge Lion." The wheels were of oak wood with iron tires.

There were two vertical cylinders, with 36-inch stroke, at the back of its horizontal boiler. The other three imported engines seem never to have traveled upon a rail. They were long stored in an East side warehouse and their final fate is not known.

The trial trip of the "Lion" was a gala event. The railway track was of hemlock rails spiked to hemlock ties. It had been laid unseasoned, in summer, and the rails were a good deal twisted and warped on that opening day, Aug. 8, 1829. The road crossed the Lackawaxen river over a frail trestle 100 feet high; the contract had called for locomotives weighing four tons, but this weighed seven, and it was feared that the trestle might not stand the burden. Allen served both as engineer and fireman. Everybody within 40 miles came to see the spectacle. An old Queen Anne cannon was brought to the scene, only to burst on the first fire. Prominent men begged Allen not to attempt to cross the river, but "he ran slowly backward and forward a few times before the multitude, then threw open the throttle-valve, shouted a loud good-by, and dashed around a dangerous curve and over the swaying bridge." He ran on a few miles and returned in safety amidst the shouts of the people. Horatio Allen soon after became chief engineer of the Charleston & Hamburg Railroad, chartered in South Carolina, and another of our early lines, and he later served as assistant engineer on the Croton Aqueduct, president of the New York & Erie Railroad, and consulting engineer of the Brooklyn bridge. He lived to be 87 and all his life he liked to tell of that trip of the Stourbridge Lion.

The trip served to convince Allen and the directors that the road was not suitable for locomotives, so it was run off the rails near the canal dock, and remained an object of curiosity and of some dread for many years. Would that it were available for the celebrations to come, but it was long ago relegated to the scrap heap.

The Early Railroads of Kentucky.

By CHAS. E. FISHER.

Much attention has been given to the railroads that started on the Atlantic seaboard and reached out to connect with the first nearby town. The three pioneer roads in New England were the Boston & Lowell, the Boston & Worcester and the Boston & Providence, connecting Boston with those three respective towns. The Mohawk & Hudson connected Albany with Schenectady, N. Y. The pioneer Baltimore & Ohio was slowly pushing westward from Baltimore and the citizens of Charleston, South Carolina were building their own railroad westward.

This enthusiasm for railroad building crossed the Allegheny mountains and filled the people of Kentucky and the citizens of Lexington with the ambition of railroad building for the records show that the Lexington & Ohio Railroad was one of the first railroads built west of the Allegheny Mountains.

Lexington, Kentucky, is named after that famous little Massachusetts town of Revolutionary fame and was settled about that time. The people were fearless and progressive and as time passed with the increase in growth of Louisville and Cincinnati they realized their inland handicap and set about to make connection with the Ohio River.

On January 29, 1830 the Legislature granted a charter to the incorporators of the Lexington & Ohio Railroad to build a road from Lexington to Frankfort, the capital of the state. Goods could be unloaded from the railroad to barges and scows and float down the Kentucky River to the Ohio and thus communication would be established with the outside world and Lexington would be in a fair way to compete with the growing centres, Louisville and Cincinnati.

The following is taken from an early report and is of interest.

1 "There will be one Inclined Plane at Frankfort about 2200 feet long descending one foot in fourteen feet. All the residue of the road can be graded to thirty feet or less in a mile which is a fraction over one fifteenth of an inch raise in one foot.

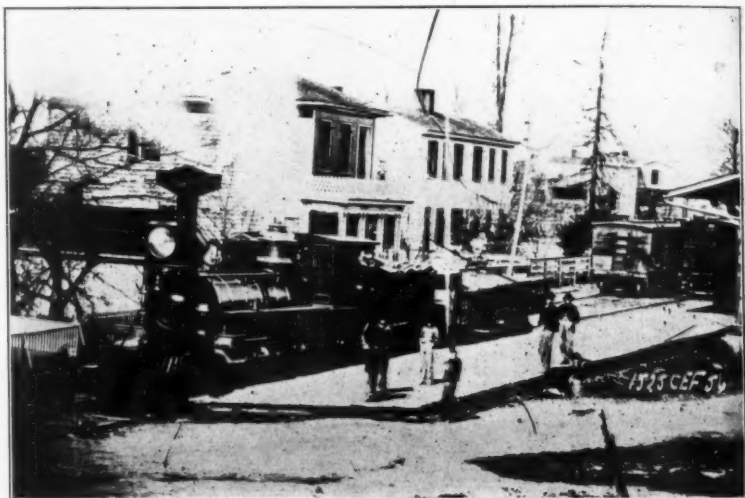
2 On that grade there will be no cut deeper than nineteen feet at the apex and but one of that depth.

3 There will be no embankment over twenty feet high, no bridge over thirty feet high.

4 The distance to Frankfort will not be increased two miles in length over the present traveled road.

5 There will not be as much rock excavation in the grading as will be required to construct the road.

6 On the thirty foot grade which has been tentatively adopted a single horse is capable of travelling with seven tons weight with as much ease as five horses can draw two tons on our present roads in their best condition. Hence it follows that one man and two horses can transport on the Railway as much weight in the same time as thirty-five horses and seven men on our present roads."



LOUISVILLE & FRANKFORT R. R "FRANKFORT"—HURLEY.

The distance between Lexington and Frankfort is twenty-eight miles and for construction purposes the route was divided into two divisions. The first division was between Lexington and Villa Grove, a distance of six miles. The second division embraced the remainder of the road.

Upon receipt of the charter, the incorporators of this enterprise proceeded to organize. Mr. E. J. Wenter was elected President and the following were the first Directors of the famous railroad: John Brand, Benj. Gratz, Geo. Boswell, Wal-

ler Dunn, Richard Haggins, Henry Clay, Jos. Bruen, Henry C. Payne, Elisha Warfield, B. W. Dudley and Charlton Hunt.

The road was capitalized at \$800,000.00 and the shares were issued in denominations of \$100.00 and it is on record that so enthusiastic were the citizens of Lexington, that in one day, Feb. 8, 1830, \$204,500.00 was raised, and at the end of five days \$796,600.00 was raised.

Additional surveys were required and made and it was not until October 20, 1831 that the first stone sill which marked the beginning of actual construction work, was laid at the corner of Mill and Water Streets, Lexington. The road was built, as was the custom in those early days with the rails laid on stone sills running lengthwise. The rails were imported from England and the road when completed was solidly and substantially built. The opening notice of this road is of interest:

“TRAVELLING”

ON THE

LEXINGTON & OHIO RAILROAD.

The first six miles of the Road Being Completed
a Passenger Car will Daily Leave the Tower,
Market House for the end of the First Division,
at 9½ O'clock A. M. and 2½

O'clock P. M.

Returning will leave the end of the Division for
Lexington at 10 O'clock A. M. and 3½

O'clock P. M.

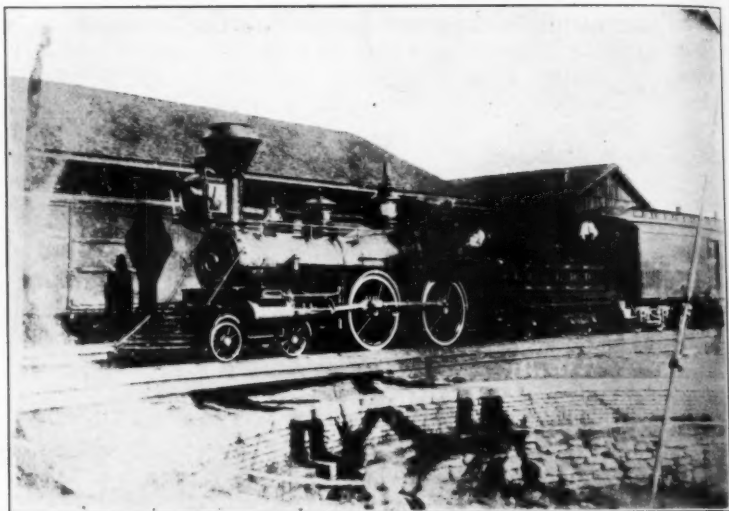
Companies of 12 or more can be accommodated
with a Private Car by giving one hours notice.

Office L & O R R Company.

January 1st, 1833.

Horse was the first means of motive power on this road and the equipment consisted of one solitary coach which would accommodate sixty passengers. A steam locomotive was 'on the way however and the records refer to one being received about the first of March, 1836. This locomotive may have been the "Nottoway" or "The Logan", the records do not show, but it is described as having a tall chimney, a single wheel and crank axle, with no cab for the engineer who was unprotected from the weather. This locomotive was doubtless of English build.

The account of the first trip this locomotive made over the road is of interest. With a train composed of first the engine and tender, then two common burden cars and a large passenger coach painted yellow, this locomotive made the trip from Lexington to the end of the road with little trouble. The return trip was made with the above train in the reverse order and was proceeding at a moderate pace when about a mile from the starting point they jumped the track on a curve. One person was killed and several were injured. None of the cars turned over. But as the account states "Had the burden cars been



L. C. & L. #37—BALDWIN.

substantially railed around or if only passenger cars had been used or all had been drawn and not pushed, nothing serious would have been the consequence. Too much praise cannot be bestowed upon the engineer. Although under considerable headway he stopped almost instantly and much sooner than a stage with horses could have been halted".

The above accident put a damper on the use of the steam engine for passenger service and for a few years thereafter the horse handled the passenger coach, the locomotive the freight equipment. Of these locomotives it may be well to mention here that in addition to the "Nottaway" and "The Lo-

gan", there were the "Daniel Boone" and "Joe Davis". These were the first locomotives on this road, the "Boone" came from the Baldwin works in 1842. Mystery still shrouds the other three.

The road was completed from Lexington to Frankfort on January 31st, 1834 and the road which started out so gloriously soon ran into financial troubles and finally, in a much run down condition, both physically and financially, the road was sold to the State of Kentucky in 1840.

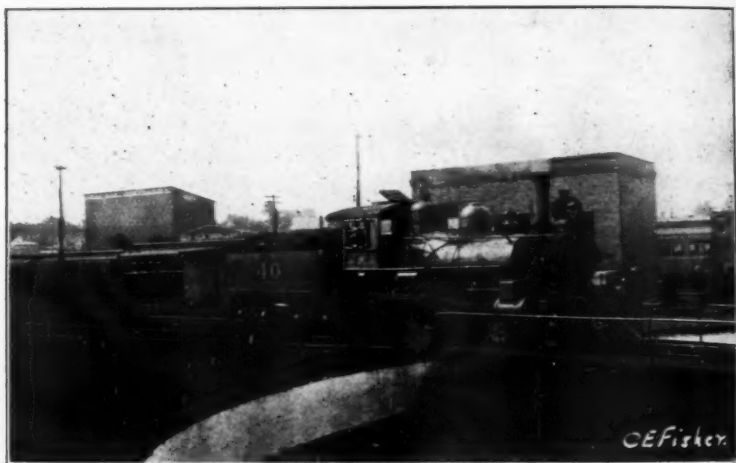
The State was able to do but little better than the private owners. The road hardly paid for itself and was allowed to run down. Agitation started against the road and public opinion arose against the miserable service offered by the state owned road.

A road was projected between Frankfort and Louisville to connect with the Lexington & Ohio R. R. and afford a better outlet for that road at Louisville than at Frankfort and so bitter was the feeling against the L. & O. that another road was projected between Frankfort and Lexington to make connection with the Louisville road and leave the state-owned property out altogether. This new project was called the Lexington & Frankfort R. R. and the State of Kentucky, having tired of railroad operation, sold the Lexington & Ohio about 1848 to the Lexington & Frankfort interests.

The Lexington & Frankfort rebuilt much of the road and meanwhile the Louisville interests under the caption of the Louisville & Frankfort R. R. began their construction work. The first train was run between Louisville and Frankfort in June 1851. These roads operated as separate roads for a period of four years and then were consolidated to the Louisville & Lexington in 1855 and on May 5th of that year, through train service was given between these two places.

It is well to digress here and consider another formidable competitor that this road had. The railroad enthusiasts were bitterly assailed by the canal interests. Canals were being built in Ohio and there was no reason why Kentucky should not have that cheap form of transportation and the fact that it was so successful on the Ohio River only led strength to the arguments. In February 1836, the Charleston & Cincinnati R. R. was chartered in the Kentucky Legislature to build a railroad from Cincinnati, through Lexington to Charleston, S. C. Branches to be built to Louisville, Paris, Maysville (on the Ohio River) and Newport. The charter stipulated that the road should be built through Lexington. The Louisville & Lexington R. R.

was able to bring pressure to bear so that the branch to Louisville would not be constructed. The canal interests so bitterly assailed this project that soon people lost interest in the enterprise and was soon forgotten. It was not revived until some years later, 1872, that the City of Cincinnati was granted the right of way to build the Cincinnati Southern R. R. from Cincinnati to Chattanooga, and although this road is under lease today, the City of Cincinnati still owns this road. The branch of this former enterprise from Lexington to Maysville was originally the Lexington & Maysville R. R. and opened from Lexington to Paris in 1853. In the fall of 1854 the road was



L. & N. #40—BALDWIN 1886—Still in service.

completed to Covington. The branch to Maysville was completed at a later date and the road became known as the Kentucky Central, now controlled by the Louisville & Nashville R. R.

But to return to the Louisville & Lexington R. R. It was soon realized that the road must reach Cincinnati and in December of 1866 it was decided to commence work immediately on the construction of the Louisville & Cincinnati "Shortline". This road diverged from the Louisville & Lexington at La Grange and on April 21, 1869 the last rail was laid at McCoy's Forks, three miles west of Walton, Boone County, Ky. Service was established about a week later and the name was changed to the Louisville, Cincinnati & Lexington R. R.

Much has been written about the Louisville & Nashville R. R. and a word here may not be out of place. The road was chartered March 2, 1850 and it was strictly a Louisville enterprise. Through the energy and efforts of John L. Helm, James Guthrie and H. D. Newcomb the road was finally opened to Nashville, a distance of 185 miles in November 1859 and proved to be one of the most important roads ever built south of the Ohio River. Of invaluable service during the war it was one of the first to recover from the effects of the war. As time passed it saw the necessity of reaching Cincinnati and in 1881 the Louisville & Nashville purchased title to the Louisville, Cincinnati & Lexington R. R. and thus ends the history of Kentucky's first railway. The L. & N. still retains the name of the Louisville, Cincinnati & Lexington as one of its division names but it also marks the passing of the Lexington & Ohio Railroad.

LOUISVILLE & NASHVILLE RAILROAD MOTIVE POWER—1867.

#1	Niles & Co.	1855	14	x20	60	28000
2	Niles & Co.	1855	14	x20	60	28000
3	Fairbanks (T L W)	1856	14	x22	66	30000
4	Fairbanks (T L W)	1856	16	x22	60	35000
5	Moore & Richardson	1857	15	x20	60	30000
6	Moore & Richardson	1857	15	x20	60	30000
7	Baldwin L W	1858	15	x18	42	40000
8	Baldwin L W	1858	14½	x18	42	40000
9	Moore & Richardson	1858	15	x20	66	44000
10	Moore & Richardson	1858	15	x20	66	44000
11	Baldwin L W	1858	14½	x18	42	34000
12	Baldwin L W	1858	13	x24	60	28000
13	Baldwin L W	1858	14½	x18	42	34000
14	Taunton L W	1864	16	x24	66	40500
15	Taunton L W	1864	16	x24	66	40500
16	Moore & Richardson	1859	16	x22	54	39800
17	Schenectady L W	1864	16	x22	66	40500
18	Moore & Richardson	1859	15½	x20	66	33200
19	Moore & Richardson	1859	15½	x20	66	33200
20	Moore & Richardson	1859	15½	x20	66	33200
21	Moore & Richardson	1859	15½	x20	66	33200
22	Moore & Richardson	1859	15½	x20	66	33200
23	Schenectady L W	1864	16	x24	54	61000
24	Schenectady L W	1864	16	x24	54	61000
25	Schenectady L W	1864	16	x22	66	54000
26	Moore & Richardson	1860	16	x22	60	39800

27	Moore & Richardson	1860	16	x22	54	38800
28	Moore & Richardson	1860	16	x22	54	38800
29	Moore & Richardson	1860	15	x20	54	38800
30	Louisville & Nash.	1860	14	x20	60	44000
31	Schenectady L W	1860	16	x24	60	61000
32	Schenectady L W	1860	16	x24	60	61000
33	Schenectady L W	1860	16	x24	60	61000
34	Schenectady L W	1860	16	x24	60	61000
35	Baldwin L W	1861	18 $\frac{1}{2}$	x22	52	65000
36	Baldwin L W	1861	18 $\frac{1}{2}$	x22	52	65000
37	Baldwin L W	1861	18 $\frac{1}{2}$	x22	52	65000
38	Baldwin L W	1861	18 $\frac{1}{2}$	x22	52	65000
39	Baldwin L W	1861	18 $\frac{1}{2}$	x22	52	65000
40	Baldwin L W	1861	18 $\frac{1}{2}$	x22	52	65000
41	Schenectady L W	1862	16	x24	60	61000
42	Schenectady L W	1862	16	x24	60	61000
43	Schenectady L W	1862	16	x24	60	61000
44	Schenectady L W	1862	16	x24	60	61000
45	Mason	1862	16	x22	66	54000
46	Mason	1862	16	x22	66	54000
47	Taunton L W	1862	16	x22	66	54000
48	Schenectady L W	1863	16	x24	54	61000
49	Schenectady L W	1863	16	x24	54	61000
50	Baldwin L W	1864	16	x24	60	61000
51	Baldwin L W	1864	16	x24	54	61000
52	Baldwin L W	1864	16	x24	60	61000
53	Baldwin L W	1864	16	x24	60	61000
54	Rogers L W	1864	16	x24	60	61000
55	Rogers L W	1864	16	x24	60	61000
56	Mason	1864	16	x24	60	61000
57	Mason	1864	16	x24	60	61000
58	Taunton L W	1864	16	x24	60	61000
59	Taunton L W	1864	16	x24	60	61000
60	Schenectady L W	1864	16	x24	54	61000
61	Schenectady L W	1864	16	x24	54	61000
62	Schenectady L W	1864	16	x24	54	61000
63	Schenectady L W	1864	16	x24	66	54000
64	Schenectady L W	1864	16	x24	54	61000
65	Moore & Richardson	1864	16	x22	60	61000
66	Moore & Richardson	1864	16	x22	60	61000

In addition to the above interesting list of locomotives the following locomotives were delivered to these early Kentucky railroads:

- #51 Covington & Lexington R. R., "Bourbon", Portland, July 11, 1853.
 - 52 Covington & Lexington R. R., "Pendleton", Portland, Sept. 6, 1853.
 - 53 Covington & Lexington R. R., "Falmouth", Portland, July 29, 1853.
 - 54 Covington & Lexington R. R., "Harrison", Portland, Sept. 6, 1853.
 - 502 Covington & Lexington R. R., "Pony", Hinkley, Feb. 22, 1854.
 - 503 Covington & Lexington R. R., "Mule", Hinkley, Feb. 22, 1854.
 - 311 Louisville & Frankfort R. R., "Shelby", Hinkley, June 21, 1851.
 - 338 Lexington & Frankfort R. R., "W. A. Dudley", Hinkley, Oct. 21, 1851.
 - 450 Maysville & Lexington R. R., "Henry Clay", Hinkley, June 13, 1853.
 - 461 Maysville & Lexington R. R., "Paris", Hinkley, July 28, 1853.
-

Consolidation with the International Locomotive Association.

The last part of 1922, Mr. Arthur Curran of the Organization Committee of the I. L. A., approached the officers of this Society upon the matter of consolidation and efforts were made to work out some plan that would be beneficial to both Societies. Your officers were of the opinion that the two societies would be better off if left to themselves. While there is considerable in common in regards to the objects of both societies, and there is doubtless an ample field for both of these organizations, at the same time the officers felt that for the best interests of this Society was not to consolidate at present.

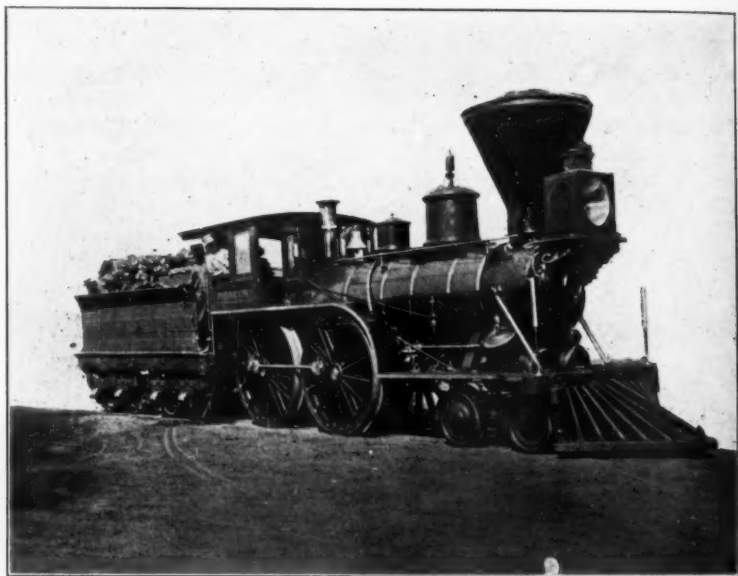
The I. L. A. was sponsored by Messrs. Arthur Curran, C. B. Chaney and Norman Thompson. It is the understanding that Mr. Curran is no longer connected with the International Locomotive Association and has withdrawn his support from that Society.

Railroads of the West.

By D. L. JOSLYN.

The first railroad in the West was the Sacramento Valley R. R. which was started in 1855 and completed in 1856. It ran from Sacramento, the Capital of California, to Folsom, a mining town on the famous American River, 22 miles East of Sacramento.

This road was built by C. F. & C. K. Garrison, and was financed by Sacramento capital. T. D. Judah, a young surveyor from the East, was chief engineer of the road.

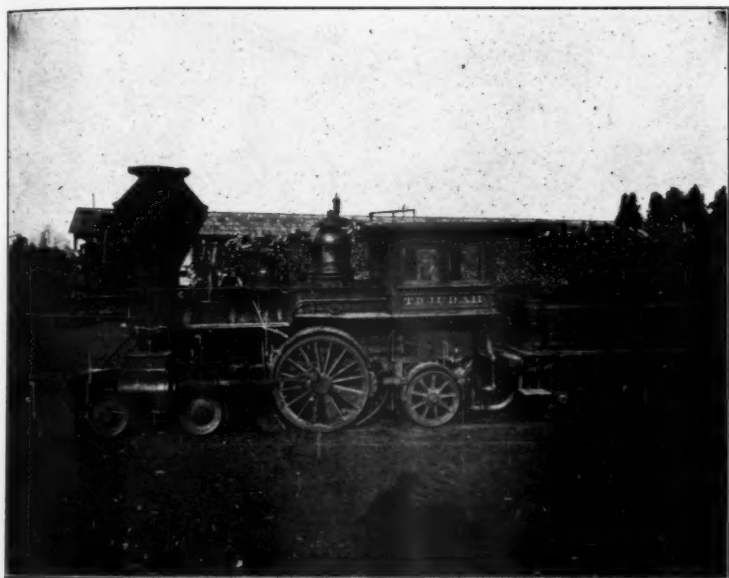


S. V. R. R. #1—"PIONEER"—GLOBE WORKS—1849.

The first locomotive on this road was an 8 wheeler, built by the Globe Works of Boston in 1849 for an Eastern R. R., and was sold in 1855 to a San Francisco man who had a contract to level the sand dunes and grade streets in that city. The locomotive arrived in San Francisco on board of a sailing vessel in the year 1855 but was never set up there. G. F. Garrison of the S. V. R. R. purchased it in 1856 and it was brought to Sacramento on board of a sailing vessel. Its name at that time

was "The Elephant" and had been so named by its builders due to its immense size.

It was renamed the "C. K. Garrison" in honor of the president of the S. V. R. R. and held that name until 1868 when it was renamed "Pioneer" in recognition of its having been the first locomotive on the Pacific Coast. The second locomotive of this road was the L. L. Robinson also a Globe Wks. Loco. The third loco. was a Hinkley and was named G. F. Bragg.



C. P. #4—"T. D. JUDAH"—DANFORTH COOKE & CO. 1863.

The Sacramento Valley R. R. was finally taken over by the S. P. Co. in 1885 and extended to Placerville, the famous old mining town of the days of '49, in 1888, and is still the Placerville branch of the S. P.

In 1860 or thereabouts a road was built from Lincoln, Placer Co., a small place north of Sacramento, East to Folsom a distance of about 12 miles, but it never payed and went out of existence about 1864. The C. P. R. R. of Calif. took over their rails, rolling stock etc. They had 2 or 3 Hinkleys which were used in grading the C. P. In 1863 the Valley R. R. was built

from Brighton, a station on the S. V. R. R., to Freeport on the Sacramento river. It was operated for a short time by the S. V. R. R. but soon went under as it served a territory that was thinly populated.

The Western Pacific R. R. was incorporated in 1863 and a contract let to build a railroad from Sacramento to San Francisco Bay by way of Stockton and through the Niles Canon. The contract price was \$5,400,000 and the road was to be built in 4 years. It was not completed however until 1869.

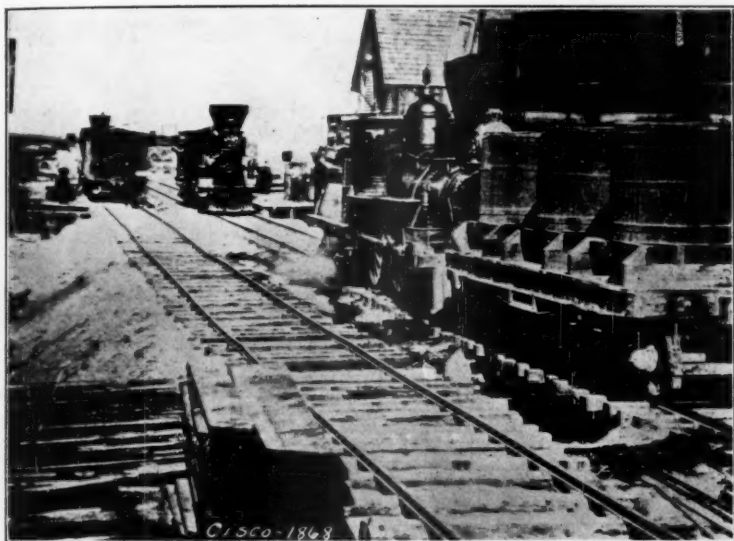


SNOW SHEDS IN THE SIERRA NEVADA MOUNTAINS.

The first passenger train over this road leaving Sacramento in August 1869 consisted of 3 cars drawn by the locomotive C. P. Huntington. The road at that time was completed as far as Stockton and strange to say that train made the run in the same time that the trains of today do. This road was opened through to Oakland in Oct. '69 and the trains of the C. P. R. R. ran through to Oakland over its lines. It was finally taken over in 1870 by the C. P. R. R. as the stockholders of the C. P. owned stock in the W. P. It constructed a branch line from Niles to San Jose where it connected with the San Fran-

cisco and San Jose R. R. which was constructed in the late '60s.

In April 1864 the California Pacific R. R. was incorporated and a contract let to build a railroad from Marysville on the north of Sacramento, south to Davisville with a line from that point to Sacramento, bridging the Sacramento river at the latter point. and a line west from Davisville to Vallejo, from which point a line of steamers ran to San Francisco, through Vallejo Straits, San Pablo Bay and San Francisco Bay. This line was completed in 1869, and is still in operation as part of the S. P.



CISCO, CAL. IN 1868, BUILDING THE CENTRAL PACIFIC R. R.

In 1860 T. D. Judah, the engineer of the S. V. R. R., ran a survey East over the Sierra Nevada Mountains with the idea of building a road to connect with the East. Such a road was badly needed if California was to ever be developed, as the only means of getting to the Eastern States was by sailing vessels from San Francisco and around the dangerous Cape Horn, a trip that took anywhere from 140 to 240 days to Boston. Or the overland route via ox teams which took on an average of 6 months.

Young Judah took his scheme to San Francisco capitalists who merely laughed at him and told him he was dreaming, to wake up, that it was out of the question and an impossibility to cross the Sierra Nevada Mountains with a railroad. Judah then came back to Sacramento where he secured the interest of Collis P. Huntington and Mark Hopkins of the firm of Huntington, Hopkins and Co., miners supplies, hardware etc., Leland Stanford, Gov. of California, and Chas. Crocker, an attorney, and they formed the Central Pacific R. R. of California



TRUCKEE, CAL. IN 1868, BUILDING THE CENTRAL PACIFIC R. R.

and pledged themselves to build a railroad to connect with the East.

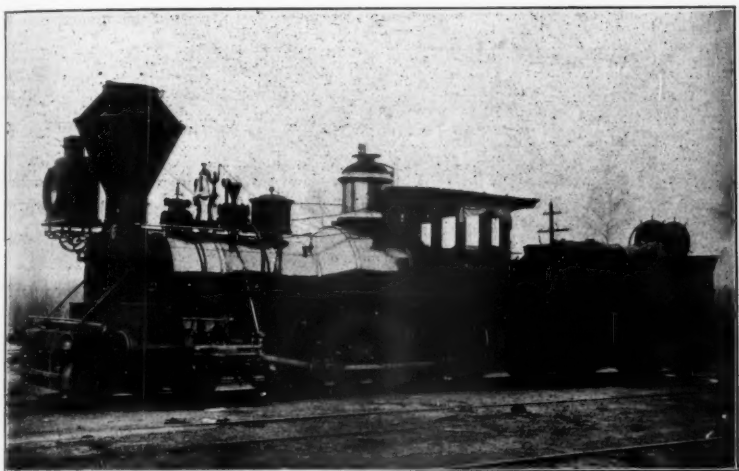
Government aid was finally secured and on January 16th, 1863 at the foot of K St. in the city of Sacramento, Governor Leland Stanford of California turned the first shovelful of earth for the great Pacific R. R. That was a gala day in Sacramento. All business was suspended, bands played, men cheered and the 12 pounder of the city roared out a salute of 35 guns.

It had been raining for over a week but that day the sun

came out bright and clear and it seemed that the very heavens smiled on the project.

Only one thing marred the complete happiness of the occasion. Theo. D. Judah, the man who had struggled so long and so hard for this day to arrive, had passed away a few days before, and did not live to see his dream come true.

Collis P. Huntington was east getting materials with which to construct the road and on March 21st word was received from him that he had purchased rails etc. enough to construct 50 miles of road, also had secured a locomotive and was dis-



THE "GOV. STANFORD", FIRST LOCOMOTIVE ON THE C. P. R. R.—
R. NORRIS & SONS.

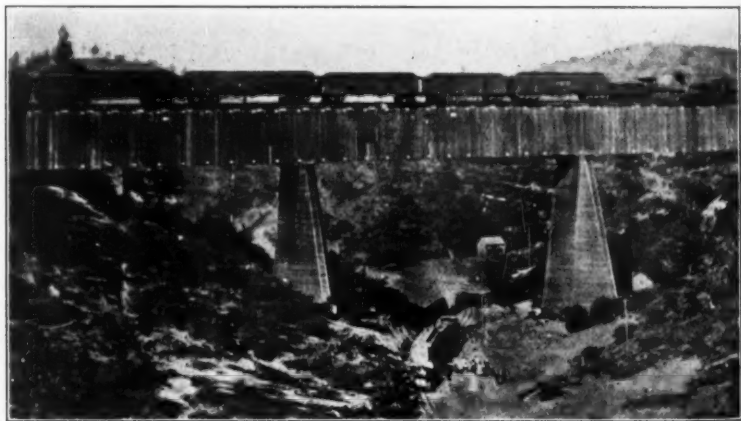
patching them via sailing vessels from Philadelphia. The first boats to arrive at San Francisco were the S. C. Grant and Herald of the Morning, arriving at San Francisco August 19, 1863.

The last named vessel had on board a Norris loco. No. 1—named the "Gov. Stanford." The first rails, also the first loco. were brought to Sacramento on board the river schooner Anna R. Forbes, arriving here on Oct. 7, 1863. The first rails of the new railroad were laid Oct. 26, 1863 and from then on the road building was carried forward with all dispatch.

The Loco "Gov. Stanford" was set up and made a trial trip on Tuesday, November 11th, 1863, and had on board as passengers, Leland Stanford, President of the C. P. R. R., Chas.



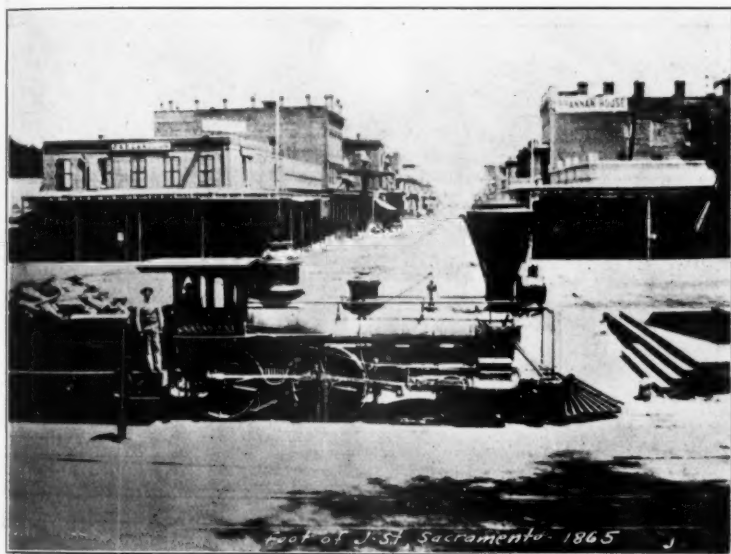
CHINAMEN AT WORK BUILDING THE C. P. R. R.



LONG RAVINE TRESTLE NEAR "CAPE HORN" ON C. P. R. R. WITH
NEVADA COUNTY TRAIN UNDERNEATH.

Crocker, Supt., S. S. Montague, Chief Engineer, the city trustees and some 15 or 20 volunteer passengers. When the end of the line was reached, (that is as far as rails were laid,) a case of champagne was opened and the road formally saluted in a round of toasts.

Road building went steadily forward until Cape Horn was reached, when the builders met with their first real obstacle. Cape Horn was the name given to a cliff that rises straight up from the American river canon, and the sides of this cliff had



C. P. R. R. #7—"A. A. SARGENT"—BUILT BY BOOTH & Co.,
SAN FRANCISCO.

to be cut away to make a ledge for the railroad. Chinamen were let down from the top in baskets and picked and drilled at the cliff, every once in a while making impression enough to put in a charge of black powder, then the Chinamen were hauled up and the charge set off. This was the only means at hand to overcome Cape Horn. The S. P. has since tunneled this dangerous place. In the early days a locomotive went over the rails at this place and down into the canon and it is still there.

After overcoming Cape Horn the next obstacle was snow. The snow fall in the Sierra Nevada Mountains is very heavy and

slides are frequent. It was necessary to construct sheds over the track and there are sheds there to this day, from Blue Canon to Truckee, a distance of 41 miles. Were it not for these sheds trains could not operate in the winter months.

The locomotive G. F. Bragg was bought from the S. V. R. R. and converted into a winding engine and taken to the Summit where it assisted in hauling materials up the grade.

The tunnel at Summit was taking so long to drive that



HAULING SUPPLIES TO SUMMIT, CALIF.—C. P. R. R. 1868.

finally an 8 wheel Rogers was skidded over the Summit with the aid of oxen and road building progressed on that side. No more difficulties were met with until the builders got out on the Nevada desert when it became a problem to secure water.

On May 10th, 1869 the C. P. R. R. met the U. P. R. R. at Promontory and the last spike was driven.

The telegraph was connected to the spike so that every blow struck with the hammers were recorded in all of the principal cities. Then the telegraph operator clicked the message "All newspapers East and West, the last tie is laid, the last spike is driven, the Pacific R. R. is completed."

the U. P. R. R. drove the last spike which was of pure California gold and was presented by David Hewes of San Francisco.

The last tie, the golden spike, the hammer that was used to drive the spike and the locomotive "Gov. Stanford" are all at the Stanford University at Palo Alto and any one may see them.

One feat that was accomplished by Mr. J. H. Strobidge, Supt. of Construction for the C. P., has never been equaled or surpassed. On the 29th of April, 1869 Mr. Strobidge and his



TRUCKEE STATION AND YARDS—C. P. R. R. 1868.

men laid 10 miles of railroad and had trains passing over it.

Of the motive power, the C. P. bought 163 locomotives up to 1868 and they came from the following builders: R. Norris and Sons, Wm. Mason, Booth and Co., Danforth Cooke & Co., McKay and Aldus, New Jersey Loco. Co., Grant Loco. Co., Schenectady Loco. Co., Danforth Locomotive and Mach. Co., Rogers, Rhode Island, and Globe Wks. None were purchased from the Baldwin Wks., and there were none bought from Baldwin until after 1892. In the early days the locomotives were all named, but the names were dropped from the cab in

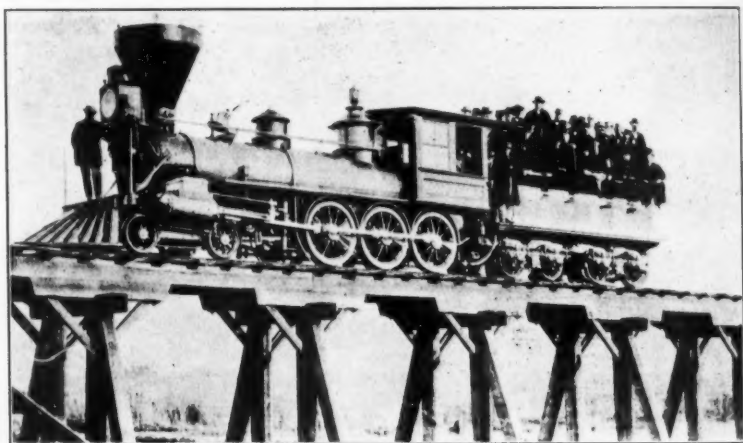
1870. The old employees continued to call them by name even as late as the '80s.

When we stop and think of the task those early railroad builders undertook, we wonder sometimes whether we are quite as equal to our tasks today as those hardy pioneers were to theirs.

The capitalists laughed at T. D. Judah and his dream to build a railroad, but the road was built, and built over the survey that he made and the road stands there today as a monument to him.

To Leland Stanford, Collis P. Huntington, Mark Hopkins and Chas. Crocker the whole nation owes a debt of gratitude.

For those men, when every one else turned the project



THE "CONNESS"—BUILT BY WM. MASON.

down, put all of their private fortune into the scheme, and by their determination the road was built. One word more. When the locomotive "Conness" arrived in Sacramento from the Mason Works, it was considered a mighty machine. People came from far and near to gaze upon that monster. It was the first 10 wheeler that many people had ever seen.

It was a small loco. compared with those of today, having cylinders 17"x24" and 48" drivers, and weighed 35 tons. It was a well built machine tho and was in service up till 1908 when it was scrapped. It of course had a new boiler in the meantime.

The first 18"x24" locos. came from McKay and Aldus to the C. P.

In a future article I shall try and tell of the C. P. R. R. as



C. P. R. R. #113—THE "FALCON"—DANFORTH L. & M. CO.

The two men on front of the locomotive are R. R. Commissioners inspecting the road.

a locomotive works, as that road built all of its own power for a number of years.

Some Anecdotes of the Old Colony.

By WARREN JACOBS.

The late George T. Taylor, Superintendent of the Plymouth and Cape Cod Division of the New York, New Haven and Hartford was a railroad man from the ground up. He started railroading as a porter sweeping the floor in the Old Colony Depot in Boston, and he rose step by step to be a Division Superintendent. Mr. Taylor was well known by all his men, and he in turn could call every man on his division by his first name. He knew his business, and the men under him knew that he knew it and respected him accordingly. In addition to his ability as a railroad man he possessed a dry wit.

An agent on the line one day unfortunately had a disagreement with two of the patrons of the road in regard to a freight bill, computed under a new freight tariff which had recently gone into effect. Not being satisfied with the agent's explanation, as is often customary in such cases, two indignant citizens called at Mr. Taylor's office one morning and demanded the agent's removal. Mr. Taylor listened to their complaint and then knowing of course that the agent was right said gravely, "Gentlemen, if I were to discharge that man as you want me to do we would have to close that station up." His two visitors saw the point and laughed outright. Then Mr. Taylor went on to explain to them as to the extra charge on their freight, and they left his office in good humor.

A brakeman was called in "on the carpet" for some infraction of the rules, and being guilty Mr. Taylor gave him a lecture, the man in trying to defend himself said, "Mr. Taylor, Conductor Blank will tell you that I have always done my work all right." Mr. Taylor looked him over for a moment and then said, "Young man, it would sound a good deal better for Conductor Blank to say that to me than for you."

The day Mr. Taylor retired after fifty years service, he met a friend in the concourse of the South Station and in the course of conversation his friend said, "What are you going to do with yourself now you have retired, you have always been such an active man?" "Well," said Mr. Taylor, "tonight when I go to bed I am going to set the alarm clock for 6.00 a. m. and when it goes off in the morning I am going to get up and pitch it out the window."

At the time the South Boston passenger yard was being enlarged, Mr. Taylor was sitting in the switchman's shanty,

talking with the conductor of the work train one afternoon, when all of a sudden a man came rushing from the engine house not far away. The man was hatless and out of breath. "Mr. Taylor," he gasped, "there is an engine just fell in the pit." Mr. Taylor turned to the conductor of the work train and said quietly, "Al! cut your engine off and get around there and we will see what we can do," and he walked over to the engine house as though nothing had happened. That was Mr. Taylor all over. Always cool in the face of emergency and always on the job.

Loyalty is one of man's finest traits. No matter how poor or humble a man may be, if he have that in his make-up he will always command respect. Anyone who was familiar with the Old Colony Depot in Boston remembers Patsy Mahoney because he was always there, and he was there for many years, how many it is hard to say, the writer remembers him forty years ago and he looked about as old then as when he died a few years ago.

Patsy lived in one of the old houses on Cove St. across the way from the Old Colony Depot. He went home to sleep but his waking hours were spent in the depot, and he was a character. He was never regularly employed by the Old Colony Railroad, but he made a job for himself keeping the numerous small boys of the neighborhood off the baggage trucks which were stored in the old train shed opposite track 5. It was a very useful job and the road was glad to have him do it. Patsy was well known to every man on the Old Colony from the General Manager down. In his spare time away from the trucks he would run errands for the conductors and do other odd jobs. But there was one thing Patsy could not be induced to take, and that was a ride out on the road. One day several of the men got together and decided to give Patsy a ride. The old 2.30 P. M. train to Plymouth had backed in and loaded up and was about ready to start when a messenger came to Patsy with an important letter to be delivered to the baggagemaster of the Plymouth train. Patsy hurried down the platform as it was almost train time. The baggagemaster was in the plot and was of course very busy when Patsy appeared and told him to bring the letter into the car, which he did, the doors were immediately shut and locked and Patsy was a prisoner, and the train pulled out with Patsy kicking on the door and shouting at the top of his voice, but after the train had got out a few miles he

calmed down, and enjoyed the trip very much. When the South Station was opened and the old houses in Cove Street were torn down, Patsy moved out to Harrison Square, but he was as faithful in attendance in the new station as he had been in the old. He always had a greeting for everyone, but when he met Mr. Kendrick the General Manager or Mr. French the Superintendent, off would come his hat as a mark of special respect. Patsy died quite suddenly several years ago, and there was not a man who was not sorry to hear of old Patsy passing on or who ever failed to respect the loyalty he had always shown.

In the days following the great Civil War, Dan Callahan came to work for the Boston and Albany Railroad as a freight brakeman.

Dan was a son of the "ould sod" which has given so many splendid men to the American railroad service, and he had that grand quality no son of the old sod ever lacked and that is loyalty.

A matter of forty years or more ago Dan drifted over from the Albany to the Old Colony road, and he was a fixture on the Old Colony and its successor, the New Haven, to the day of his death.

Dan was a brakeman on the Old Colony for many years in the old Kneeland Street yard, and at the time the South Station was opened by some freak of fortune, he landed in the new depot as a porter—and he was a good one. It was not long before his services were in great demand. In the summer season he had a line of regular customers, and it frequently happened that prominent business men of New York, Chicago or Kansas City, summer residents of Cape Cod, would drop Dan a line that their families would be in Boston on a certain train and for Dan to be on hand to attend to their baggage etc. and see them safely aboard the Cape express—and Dan was always on the job.

But the crowning glory of Dan's career was when he was made a special porter for President Mellen, at the time the latter was head of the New Haven. Mr. Mellen was in Boston at regular intervals, and Dan was on hand to carry his bag down to the train, and render any other service requested. It was a great sight to see Dan on these occasions for he was always full of business, and after Mr. Mellen's departure, he would often proudly display a fifty cent piece which had been

given him by the President of the road. Dan was never lacking in what the boys call "nerve," neither did he stand in great awe of high rank, and he would converse with Mr. Mellen as easily as with a brakeman—that is when he got the chance, which was not often, for Mr. Mellen was a busy man.

As an imitator Dan would have made a fortune on any stage, but he liked the railroad too well to leave it. He could delight the children with a wonderful imitation of Punch and Judy, or he could imitate the neigh of a horse so perfectly, for the benefit of the railroad men, that they would look around startled, expecting to find a horse escaped from some express car out in the yard.

Dan was always at his best with the ladies, and he could do so many little acts of courtesy and kindness for them, that there is no doubt they looked on him as one of the most important officials in the South Station.

Dan died a few years ago and another of those quaint, odd and loyal characters that go to make up the big railroad army, and who will always be missed, passed on.

Of all the conductors who have run a train in New England, none was ever better known or more famous than Asa R. Porter, conductor of the 6.00 P. M. Fall River Line Steamboat Express—the crack train of the Old Colony Railroad. In the Old Colony days this train ran from the Kneeland Street Station, Boston, to Fall River via South Braintree.

Mr. Porter started on the Old Colony as a brakeman way back in the '50s and he was conductor of the boat train nearly forty years, in fact up to the time of his death. With him on the train was a baggagemaster who was one of the finest fellows in the world, but one of the best practical jokers who ever existed.

Mr. Porter was a man of very dignified presence, and is best remembered by the fact that he always wore a pink in the lapel of his coat. He was one of the most courteous gentlemen who ever ran a passenger train, and if there was one thing he detested, it was a quarrel, argument or trouble of any kind.

Knowing this the baggagemaster and his friend the fireman of the boat train decided to have a good joke on the "old man."

They selected a Fourth of July night and each man before leaving Boston secured a revolver and a box of blank cartridges.

In those days the crew of the boat train slept upstairs over the station at Fall River wharf so as to be on hand early in the morning to run the train back to Boston. In addition to the sleeping quarters there was a wash room, and the crew ate their supper in the station restaurant downstairs.

The joke as arranged by the baggagemaster and fireman was that they would start a quarrel in the wash room when the crew were washing up for supper and end it by pulling out their revolvers and shooting at each other.

On arrival at Fall River that night after the passengers had left on the boat, and the train had been put up, the crew started for the wash room, the fireman leading, and the baggagemaster bringing up the rear. The engineer and the other members of the crew except Mr. Porter had been given the tip of what was coming. On entering the wash room the baggagemaster stood waiting a few moments, and then demanded of the fireman if he was going to take all night to wash up. "I'll take as long as I please," was the surly answer. One word led to another, fast and furious grew the quarrel. Conductor Porter, taken by surprise, attempted to interfere—and then out came the revolvers and the two men began shooting. Mr. Porter forgetful of the significance of the day, and of everything else but the fact he was undoubtedly a witness of deliberate murder, made a jump for the stairs and up to the city for a policeman. Finding one he told his story, and the officer knowing Mr. Porter as about everybody in Fall River did in those days, hurried back to the Wharf Station with him, both to be met with a hearty laugh from the boat train crew who were quietly eating their supper together.

Mr. James H. French, Superintendent of the Central Division of the Old Colony, and also for a long time of the Cape Cod Division, may well be called the "grand old man" of the Old Colony Railroad. He died last year at the home of his daughter at East Orange, N. J., with whom he had made his home for a number of years. He was eighty-two years old at the time he died, and had been retired from active service a number of years, but he retained his interest in railroad men and matters up to the very last. His last years were spent away from the road he loved so well and served so faithfully, but he often visited among his old railroad friends in Boston, and they were always delighted to see him.

One of Mr. French's favorite stories was in connection with the "Dude train," the famous summer express between Boston and Woods Hole, all parlor cars and patronized by wealthy residents on the Woods Hole branch. This train ran on a very fast schedule and was express from Boston to Tempest Knob, just below Wareham, fifty miles out of Boston.

One day this train struck and killed a trespasser who was walking along the tracks. At the inquest one of the eye witnesses was a son of the old sod. He was asked if he saw the accident. "I did sorr." "What happened?" "Well sorr the train struck this feller, and come to a sthop and all thim dudes got out."

Transportation.

JAS. M. KIMBALL.

Throughout the known history of the human race, the wealth and the material prosperity of man has ever been advanced or retarded in proportion to his facilities for marketing the products of his labor and exchanging them for the products of the labor of other men. Since the earliest time the great problem of the ages so as material progress is concerned has been the cheapening and facilitating of travel and transportation in the interests of commerce between people living in different countries, and every important invention or discovery that has quickened or cheapened travel and transportation has marked a new era in human progress. That civilized nations of antiquity met their problems of transportation of materials of great weight and bulk is proven by the mute testimony of the large stones of the pyramids and obelisks in Egypt, the monolith of stonehenge in England and the pre-historic ruins in our own Southwest. [Travelers in South America tell of a wall of ancient masonry in Peru formed of great stones from a distant quarry placed so exactly that the joints defy the entrance of the end of a knife blade. Built upon this wall, however, is a crumbling ruin, the work of Spaniards of a comparatively recent date.] The building of railroads largely solved the transportation problem of the ages. Cities and nations were no longer dependent upon transportation by water but could grow and develop anywhere and exchange their products and manufactured articles with the inhabitants of other countries. A tremendous development began at once. Within the fifty odd years of a lifetime our population has grown seven times as much as it had in the 335 years before, and our wealth has become stupendous. Transportation has to do with travel, traffic and communication. It is concerned with the movement of persons and things and with the transmission of ideas. The several instrumentalities — water-ways, highways — railroads and the vehicles used on them, the telegraph and telephone—are spoken of collectively as the transportation system. Any one of these several sub-divisions of transportation might alone furnish the theme for our consideration to-night.

First perhaps in importance stands the economic phase of the subject as it relates to the task of our great common-carriers in the rapid and equitable distribution of coal, food-stuffs, and the myriad products of the farm, mill, store and mine, a

process which vitally concerns the welfare of every citizen. It is needless to say that this problem has assumed an importance in our country during and since the World War never before equalled. In fact it is believed by many close students of affairs in the United States that we are rapidly approaching a crisis in national transportation. These men are found among nearly all ranks. They include business and professional men, merchants, lawyers, manufacturers, railway officials, engineers and farmers. They all agree that our problems while not insolvable merit the most careful study. In any consideration of present day transportation, two things stand out pre-eminently: one is the unprecedented growth of the use of public highways, and the other is the difficulty—if not failure—of old forms of transportation to meet present requirements. It is stated by a competent authority that last January there were four motor vehicles registered for every mile of road in the United States. This is an increase of two and one half motor vehicles per mile in five years. In spite of the adverse factors of deflation, bad business and general unemployment last year the number of motor vehicles increased thirteen per cent. This condition of affairs leads to a clamor for better roads. Every taxpayer needs to be reminded that modern road building is expensive. According to an estimate of the Bureau of Public Roads of the United States, Department of Agriculture, the United States spent six hundred million dollars for roads in 1921. Some sections of the Pennsylvania highway system cost as high as \$90,000 a mile, while according to a press report—a section of the Lincoln Highway between Elizabeth and Rahway, New Jersey, cost \$85,000 a mile. This section of the highway carries the heavy traffic between New York and Philadelphia. During 1918 and 1919 I was living near the Philadelphia end of this road and had frequent opportunity to observe its traffic. It is used by several large fleets of motor trucks constantly. These companies can afford to haul freight cheaply because the public both provides and keeps up the road bed. They also have no expensive terminals. Both these factors give the motor truck a great advantage over the railroad, burdened with their original purchase of right of way, cost of construction and constant repairs, heavy taxes and restricted Government regulations, to say nothing of strikes and financial difficulties. By reason of these handicaps the railroads are not keeping pace with the needs of the country. To gain some idea of what this motor-traffic means, let us compare it with that of the railroads.

Look at the network of the 259,000 miles of steel rails as shown on a big railroad map. If we imagine this network multiplied by ten with five motor vehicles on nearly every mile, we get some idea of the motor processions. A few figures by way of comparison of the amount of passengers and freight carried, show that while the railroads carried one billion thirty-four million passengers in round numbers last year, autos are estimated to have carried nearly seven billion. On a passenger mileage basis it is estimated that the railroad was only a little over one half that of the autos.

In the matter of freight the railroads have supremacy in the long haul, but it is estimated that against the one billion six hundred and forty-two million tons which they carried, the trucks came a good second with one billion four hundred thirty million tons.

Keeping pace with the development of the State Highway Systems motor transportation companies are springing up and carrying much of the local passenger traffic. There are over fifteen hundred such companies now operating in the country. They pay almost no taxes, are unregulated as to rates and wages and are not even fitted to operate on schedule. As we have seen they depend on the public for road maintenance and have no stations to keep up. In the case of deep snows or heavy mud the busses do not run, in which case the old forms of transportation have to take care of the traffic. It is not surprising in view of this condition of affairs that both Railroad and Traction officials complain of unfair competition. The question may well be asked, "Can motor vehicles be depended upon to haul passengers and freight on a fixed schedule as cheaply as the railroads that in certain sections they replace?" In a recent number of a Western Farm Journal, we find this statement:—"Probably the greatest single factor in the drastically diminished returns farmers now are receiving for their products, is the excessive freight rates." The Panama Canal reports 22543 tons of fresh fruit shipped from the West Coast of the United States thro the canal during the year ending June 30, 1922. One fourth of this total went to the cities of the Atlantic Coast of the United States. Because it is far cheaper to ship fruit from the Pacific Coast down to the equator, thro the canal, then up the coast line to New York, than to ship the same fruit the far shorter route by rail, the Seattle Chamber of Commerce announces that at least one million boxes of Washington apples and about 300,000 boxes from Oregon will be shipped via the canal this season. Before we had higher-than-war freight

rates, anyone proposing to ship Pacific Coast fruits to Atlantic ports by Panama Canal would have been considered crazy. The rapid growth of our large cities makes the task confronting our great Urban Traction Companies in the handling the crowds of city and suburban travel, at a minimum cost for highly efficient service, is a problem which demands the exercise of the highest engineering skill. No sooner is some great improvement, such as extending a subway system or building additional lines of elevated structure in our large cities completed at a cost of millions of dollars than the facilities of travel during rush hours and on holidays are found to be inadequate to handle the increasing traffic. This is particularly true of New York.

Our Maritime transportation was greatly affected by the World War. Long and acrimonious debates take place in Congress over the question of Ship Subsidy. Advocates of the measure claiming that our American vessels cannot compete with the trans-Atlantic carrying trade with those of Europe because of the latter's advantage in lower rates of wages and cheaper supplies of food for crews than are permitted by the United States shipping laws to our vessels. Opponents of Government Subsidy deny this claim and fear the tax increase and higher prices on imported goods which a subsidy combined with high tariff rates entails, as an added burden to the consumer. [The Port of Boston has its own troubles in the discriminating differential rates in force by the Trunk Line Railroad on grain from the West for export.]

To-night by an outline sketch we will briefly review the progress of transportation and travel in the United States from pioneer days to the present time. This may be divided into three periods: The first beginning with the first settlers and extending thro the Colonial period when wealth and commerce had increased and the sails of our ships whitened every sea. The second taking the period from the beginning of steamboat and railroad travel early in the last century down to the time of the Civil War and the third from the building of the Pacific Railroad to the present time. These periods are not sharply defined as in most cases the old method—because of custom, locality, cost of new equipment, etc., hold over after the adoption of the new improvements in travel as shown in the case of the continuance of horseback travel in remote regions after the establishment of the stage route. In its turn the stage persisted in country districts for many years after the advent of railroads. Perhaps the most striking instance

of the new quickly rendering the old way obsolete was in the case of the railroad passenger travel killing the business of the old passenger canal packet boats. It looks as tho we were entering a new era in the phenomenal growth of motor travel.

The advance from period to period can best be shown by the pictures which follow—

The History of Travel in the U. S. was illustrated by means of 86 slides covering methods from Pioneer days, the Sloop, horseback travel, stage coach, canal, R. R., bicycle, city bus lines, horse and electric cars, ocean and river steamboats, auto, motor cycle and airplane—with incidents relating to the various vehicles of travel.

The above was the introduction given by Mr. Kimball at the Exhibition held by this Society in the Boston Public Library last November.

"Commonwealth" B. & P. R. R.

By WESTON HOLME (V. Y. B.)

"Yes, sir, the 'Commy' was broken up for old iron last month! She's gone the way of all flesh and good engines," said Conductor York laughingly, evidently in answer to some query from a passenger on his train.

"Oh, don't say that; it makes me feel like Methuselah!" said the questioner. "Did you know Martin Henry who used to 'fire' on her? And Cotton, the engineer?"

"Oh, yes," said Conductor York, "when I first come on to the railroad as a lad I knew 'em both. Cotton was afterwards put on a switchin' engine in the yard at Providence. He got pretty old. I have lost sight of Henry for some time. He was a good feller, but he left the railroad a good many years ago, I understand, under some cloud or other, I don't know for just what. He was always a good-hearted feller though, and I always liked him and felt sorry when things seemed to go wrong. Well, I am glad to have seen you again, sir," and Conductor York passed on through the train.

The passenger was a tall, gray-haired man, somewhat under fifty, with the cast of features that would stamp him in the eyes of most observers as belonging to one or the other of the learned professions, possibly a physician. Evidently he had found a former acquaintance in the conductor, and the reply to his queries caused a quick look of half amusement and half sadness to come over his features. As the conductor left him he turned towards the window and, as if struck by some sudden remembrance, looked quickly and intently at the scene beyond and below the train's course, then leaned back quietly with his gaze still fixed outwards as the train sped across a lofty arched stone viaduct high above the surrounding country.

Far below the railroad, in the foreground, stood a picturesque old stone cotton-mill, its windows already beginning to twinkle with the lights of the operatives at work in the late November afternoon. Beyond rose a high, noble sweep of hill topped by a solitary tree silhouetted against the darkening sky; and farther still towards the west, a softly rolling country lost itself in the dim distance, bathed in the afterglow of the sun, which had sunk below the horizon. Above all hung the clear crescent of the young moon, a solitary planet glittering near it.

The scene that met his gaze harmonized with the passenger's mood, and lent itself to reverie. His expression became

more grave and deeply thoughtful, and his eyes had the look of one whose thoughts are far away from the present. The opened book which he had been reading lay forgotten in his lap. Some chord of memory had been struck. Of what was he thinking?

* * * * *

Jeffery Brandon was the son of a famous physician in Boston. In the late fifties Dr. Brandon was still living in the older aristocratic part of the town, which was already beginning to show signs of the coming metamorphosis of the quiet residential streets into the busy thoroughfares of the great and bustling metropolis of later years.

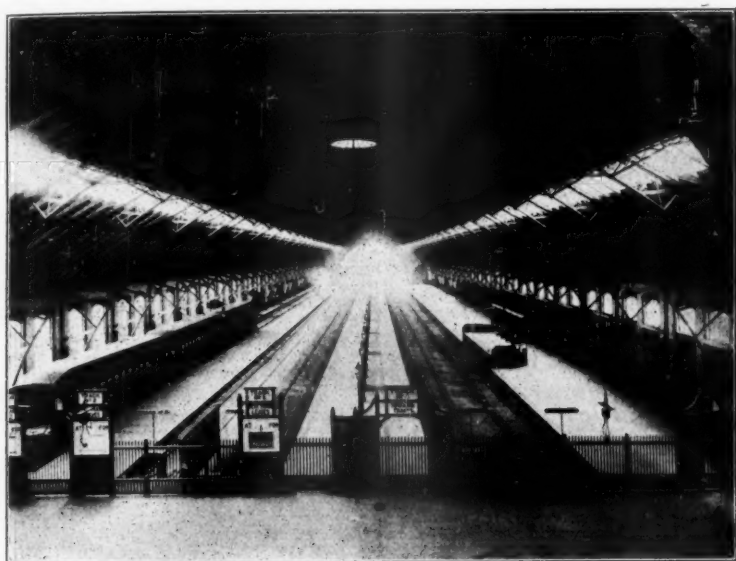
Following the threatened removal of his fine old house by the city authorities in the march of modern improvements, Dr. Brandon decided to build in an entirely new part of the city, which consisted of a network of newly laid out streets, at that time scarcely more than a desert of sand and gravel, but destined in after years to become in its turn one of the most fashionable residential portions of the rapidly growing city. The house which Dr. Brandon erected there backed upon the terminus—long since removed—of the Boston & Providence Railroad. This decision of the doctor was naturally a cause of criticism by well-meaning friends, who queried, "Why on earth does Dr. Brandon move so far out of town?" accompanying their remarks by dubious shakings of the head and prognostications of future regret on his part.

The opinions of his friends have, however, little to do with this story. Their disapproval was the conservative thought of maturity, and serves only as a contrast to the attitude of mind of the boy Jeffery, then a lad of some eight or nine summers. To him the position of his new home suggested only glorious possibilities of more intimate relations with people and things which heretofore had been placed in the realm of the Unapproachable and Unattainable.

From his earliest recollection, a locomotive had been to him a thing of fascination and delight, and the beings who guided their action were heroes of his imagination whom hitherto he had gazed at from a distance with respect not unmixed with awe, without hope of more intimate acquaintance. Here, then, was his opportunity! His father had placed him just outside the gates of this locomotive Paradise. It was now possible to peep through the bars and perhaps later enter.

In the meantime, from the back windows of his new home the boy spent hours in watching the coming and going of the

trains, the shifting of cars, the "making up" of the freight trains, and learned to know the engines by their names—for they had names in those days, not merely the stupid, unmeaning numbers of later years. Whistle, bell and "puff" became as familiar and distinctive sounds to him as the voices of friends; and before many months had passed, the boy, sitting at his bed-room window dreaming and listening, had learned to recognize each individual engine as it passed in or out below him on its daily routine of travel.



TRAIN SHED OF THE B. & P. "PARK SQUARE STATION."

A peculiar little fellow, Jeffery, in some ways; rather solitary and not fond of the rougher games in which his few boy friends indulged. His quick imagination invested these iron acquaintances with a human spirit, and many an imaginary conversation he held as he wandered among them, criticizing freely any action on their part of which he did not fully approve. Indignation filled his soul one day as a large and favorite locomotive suddenly without warning squirted hot water out of its cylinders in close proximity to him. This action called forth a sharp protest on the part of Jeffery, who under his breath ex-

claimed, "'Providence,' 'Providence,' aren't you ashamed of yourself to do anything so rude?'"

The "New York" had special distinction in Jeffery's mind, for a few years before it had carried away his oldest brother from the camp to the seat of war. Jeffery well remembered the cold, gray December day when he said "good-bye" to the soldier brother, his hero, who never returned; and whenever he saw the "New York" afterwards in those years he would say under his breath, "'New York, why didn't you bring back my brother?'"

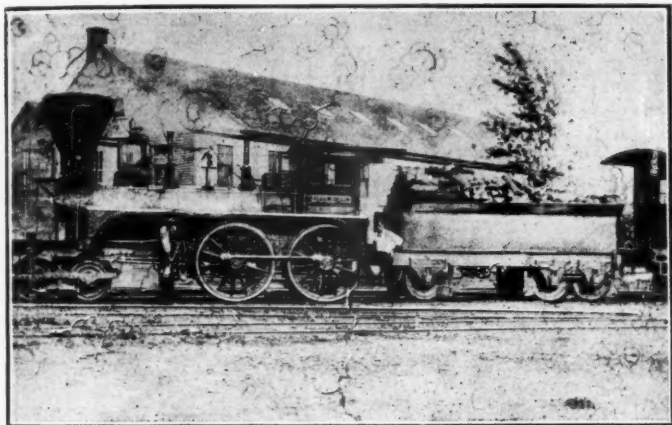
Another favorite of the yard was "Pancks," the little switching engine, true type of its famous Dickens predecessor; important, bustling, clamorous; snorting, hissing and puffing about the yard; pulling a car here, pushing another there, its ridiculous little wheels often scampering about with a velocity entirely out of proportion to the distance ever traversed by the funny little locomotive, whose antics Jeffery never wearied of watching.

Then there was the cat-voiced "Leopard," whose piercing shrieks at night roused the ire of those who lived anywhere in the neighborhood; the swell-belled "Sharon" and "Foxboro," whose tones in Jeffery's mind suggested ladylike qualities and appealed to the boy's musical ear. Lastly, the favorite "Whistler" on the night freight, a noble masculine engine whose splendid baritone used to thrill Jeffery as he listened at his window at dusk until the voice became fainter and fainter and finally died away, leaving the boy with a sense of wistful loneliness while straining to hear as the locomotive sped on its way.

His daily visits to the railroad yard finally attracted the attention of a worthy man afterwards known as "Ned Moore," the switch-tender, who occupied a small shanty used as a shelter in cold and rainy weather, and as a retreat in the old fellow's moments of leisure when not occupied in switching engines and cars as they passed to and fro in "making up" the trains. His curiosity was evidently aroused by the frequent visits of the lad who showed so much interest in the work of the yard, and one day he beckoned to Jeffery to come in and sit down. Delighted at the thought of being taken into the "inner circle," as it were, of his new acquaintance, Jeffery gladly obeyed, and by the almost red-hot little stove, in a stifling atmosphere of bad tobacco smoke, began a series of daily visits between the sessions of his school, a fact which excited an old mulatto servant in the doctor's household to the point of questioning Jeffery as to what he was going to do with the apples which he usually

took from the kitchen table before running out at the back gate. "Oh, one for myself and one for my pocket," cried Jeffery as he scampered off with his daily offering to his newly-found friend.

Many the discussions upon the comparative merits of individual locomotives in that little cabin. "I don't think much of 'Iron Horse's' puff, do you, Mr. Moore?" said Jeffery one day, very seriously; and then added with a disregard of gender, "She's got a pretty good bell and whistle; but I don't think her puff is as good as the 'Camel's,' and yet she is a great deal



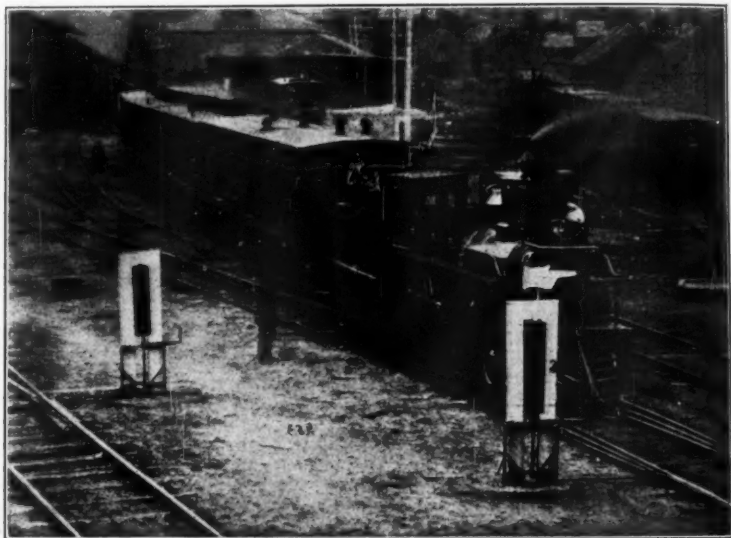
THE "IRON HORSE"—B. & P. R. R.

bigger engine." And then Jeffery showed his friend with pride his cherished "Engine Book," with its list of locomotives and their characteristics carefully tabulated as "good," "bad" and "indifferent," to the infinite amusement of the switch-tender and complete satisfaction of the boy.

Poor old "Ned Moore," one of the unnamed heroes, who a few years later when at his post was struck down and carried dying to the hospital with both legs crushed by an engine which came upon him unexpectedly. Kind old friend, whom the boy never forgot as the one who led the way to even greater delights in his locomotive world.

Visits to the old switchman satisfied to a certain extent the longing in the boy's breast to be in the midst of the life made by the great creatures he loved; but his ambition vaulted high-

er. He would never be satisfied until he had ridden in an engine and had learned to know those whom he had always regarded with respect, almost reverence. At last his opportunity came. It must have been not long after the assassination of President Lincoln, for in later years Jeffery had the distinct recollection of wearing at the time one of the hideous black rosettes, with a tintype of the martyr President in the center, affected by children and adults as a badge of mourning. This rosette was the "Open sesame" to a friendship with one who unlocked the door of his locomotive Paradise and bade the boy enter, there to find the delights that his young heart had craved



THE "PROVIDENCE"—TAUNTON L. M. Co.

so long; a friendship that was the beginning of a love and trust between a middle-aged man and a young lad, the memory of which never faded from the mind of either, when lapse of time and change of circumstances had separated the two.

It came about in this way:

One day upon his return home from the morning session of his school, Jeffery, glancing out saw something which made him start, then run to the window. There stood in the sunlight, resplendent with brass and red and gold paint (the fashion

in those days), a magnificent new engine in the freight yard directly behind the house. Looking more closely Jeffery could discern the name "Commonwealth" in large metal letters under the engine cab. With a bound he rushed downstairs and out through the back gate across the street to the freight yard, where he was not long in scrambling up into the cattle pen beyond which the locomotive was standing. The floor of the pen brought him about on a level with the upper step of the engine, then lazily standing smoking and steaming until such time as it should begin to make up its train. At first Jeffery saw no one in the cab of the engine; but as he came nearer, a man dressed in his working garb of blue overalls and jacket came to the edge of the cab, and looking at the boy and then at the Lincoln mourning badge on Jeffery's coat, said with a pleasant smile and a kindly look in his blue eyes, "What yer got there, sonny? Won't yer come in?" Jeffery's heart leaped within him as he accepted the man's offer, hardly believing that he had at last reached the goal of his fondest wishes, and it was not long before the two were exchanging questions and answers that told of the interest of the boy and the kindly response of the man to the child's happy eagerness to learn all he could of the world into which he had been finally introduced.

"My name's Martin Henry, and I am the fireman of this engine. What's yours, sonny?" said the man.

"Jeffery Brandon, and I live in that house," said Jeffery, pointing to his home.

"Well," said Henry, evidently drawn to the boy at first sight, "I am glad to see you; and you can come out every day if you like, for we shall always be standing here for the New York freight, and we don't leave until one o'clock, so you'll have time. Here comes Cotton, the engineer, now, back from his walk around town while we are waiting here; so we'll have to be off soon."

Cotton, the engineer, a fine-looking, stalwart, middle-aged man, then appeared at the step of the engine, into which he lightly clambered, nodded pleasantly to Jeffery, who, after a few words of greeting and farewell, jumped from the engine, said "Good-bye" to his newly-made friend, and waving a joyful adieu, which was answered by a smile and a salute, the little fellow scampered across the street in a state of excitement, in the height of which later he poured out his heart to his parents, telling them of the wonderful features of the new locomotive, and of the kindness of his new friend. Then running to the window again not long afterwards, with beating heart he watch-

ed the noble engine as, promptly at one o'clock, slowly and with dignity it pulled the "New York Freight" out of the yard.

The next day at the appointed hour Jeffery appeared at the back gate and sprang across the street and up to the "Commonwealth" as it again stood at its post. A cordial "Come in!" from Henry, and Jeffery slipped across the cattle pen into the engine cab, where upon the suggestion of Henry he jumped up to the fireman's seat prepared for an hour's enjoyment.

"How would you like to rub up them brasses along the boiler while I stir up the fire, Jeffery?" said Henry, putting a large piece of cotton waste into the boy's hand. Hearing his joyful assent, he added, "Go out along the running board then and rub up the brass bands; only look out not to tumble off. I'll call you in when we have to start up."

For the next fifteen minutes Jeffery was busily occupied and returned to the cab radiant, in spite of dirty hands and face, ready for any other work which his friend had to offer, while glancing back with pride at his handiwork, as the brass bands of the boiler shone in the sun.

"Guess your mother'll wonder what you've been up to when you go home!" said Henry. "You'll have to have some overalls like mine if you come out everyday." A bright idea, which Jeffery adopted at the earliest moment, as soon as the fingers of a loving mother could fashion the wished-for garments.

As these daily visits became more and more frequent, the curiosity of Jeffery's father was naturally aroused as to what sort of company his son was cultivating. So one day, without Jeffery's knowledge, he went out to the "Commonwealth" and introduced himself to Martin Henry, with the result that Dr. Brandon returned and said to his wife, "Jeffery is in good hands. The man is a good fellow, and we have not the least reason to feel troubled. The experience will do the boy good."

The old mulatto servant, however, was not so easily pleased. Jeffery's appearance after his return from his daily routine of rubbing brasses being such as to scandalize her regard for appearances. "Please the livin' goodness, dear chile" (a favorite expression), "look at them finger nails! S'posin' you was to break yo' arm, and any one was to see them hands and nails, and say, 'That's Dr. Brandon's chile!'" Such sentiments had little weight in Jeffery's mind; he only gloried in his sense of good work upon the great engine that he had learned to love like some human creature.

Day after day the visits continued, rain or shine, the boy

never so happy as when after the morning school session he ran home, donned his overalls, ran across the street to receive the hearty greeting of his friend, and then proceeded to his duties, occasionally resting on the fireman's seat, and at times pulling the bell rope when directed by Henry, as the "Commonwealth" moved about the freight yard switching the cars in the process of making up the train.

The conductor and brakeman of the train finally were brought into the circle of Jeffery's friends. They frequently congregated in the engine cab discussing the various interests of their work, the boy sitting quietly drinking in all that was said. One of the brakemen, rather a rough, although kind-hearted fellow, was inclined at times to use language not best for a boy to hear; but in after years Jeffery remembered, and always with a feeling of gratitude, that at such times a quiet word from Henry to the man was always sufficient to turn the subject into a different channel, and to make the boy realize that some one was watching over him with a quiet sense of protection, the full meaning of which he naturally could not then comprehend. He only felt a perfect trust and dependence on the strength of one older than himself, and the little fellow grew to love his friend.

And what of the effect upon the man? As day by day Jeffery came bounding across the street with beaming face, and took his seat in the cab with a comfortable look of possession, Henry's kindly heart warmed towards the lad who had thus suddenly and unexpectedly come into his daily life. Wife and child, whom he loved well, he had at home at the end of his daily journey; but this little visitor, coming from another walk in life, possessing some quality which, without his knowing why, drew the boy closely to him, seemed to be of different mould, and as the days went by and a closer companionship grew, the man's heart was strongly stirred, and he loved his little friend as something very dear and apart from others. He watched with jealous care lest anything should occur in the speech or actions of others who might be with them to sully the innocence of the young life that had come into his. His anxiety that "Jeffy," as he finally came to call the boy, should "grow up good," was expressed in many different ways in their talks together in the intervals of work upon the great engine.

One day Jeffery brought to Henry a gift, which had been the result of long thought on the lad's part as to what he could do to adequately express his affection. A large briar-wood pipe was finally purchased as a result of his massing together

all of his small earnings; and, intent upon his object, the boy ran across to the "Commonwealth" as usual, sprang into the cab and seating himself, held out the gift to his friend silently, but with radiant face. Henry stopped, looked at the pipe, then at the boy, and with softening eyes placed his hands on his little friend's shoulders, shook him gently and, with a break in his voice, said, "Jeffy, what am I going to do to you?" Then after a pause he said earnestly, "I want you to be a good man:—I don't want you to smoke,—nor to drink, nor to swear. I smoke and I swear,—because I can't help it; but I don't drink, and I don't want you to do none of 'em," and he looked deep into the boy's eyes and tightened his grasp on his shoulders. Jeffery answered not a word but looked steadfastly at his friend with glowing, hero-worshipping eyes; and Henry knew that the boy had drunk in every word and would never forget that day.

Alas! that the impulse and passionate desire of the man to keep the pure soul of the boy he loved from future harm should not have been strong enough to enable him to resist in after years the temptation to which he gave way. Nevertheless, the recording Angel that day put down that simple, loving act to Henry's credit, and doubtless weighed it well in the balance against the weakness that often comes with a loving nature when pain and sorrow have left their impress upon it.

And so the days and weeks slipped happily by. In the intervals between his work of cleaning the brasses, the boy would enter the cab and learn from his friend the methods of running the engine; how to open the throttle valve in starting; how to swing forward or back the great reversing lever, to empty the cylinders of water when in motion; and especially what to do in case of danger ahead when necessary to signal with the whistle to the brakeman to "down brakes," for in those days nothing was known of the "Westinghouse brake," a much less cumbersome and infinitely more efficient method of bringing a train to a standstill than the old one, in which a few seconds' loss of time often meant disaster and death.

On one occasion Jeffery had a vivid lesson of the necessity for quickness and presence of mind in case of danger.

The "Commonwealth" had one day been "changed off" and placed upon the afternoon passenger train. To Jeffery's great delight he had received the consent of his parents to accept Henry's invitation to go to his home. It was an afternoon in early summer, just after the close of his school. Jeffery, on the tiptoe of excitement, ran down to the "Commonwealth," which had been transferred to the passenger yard,

where, under full steam, the noble engine was hissing and roaring like some great animal impatient to be up and away. Jeffery sprang to the cab, greeted Cotton and Henry, jumped onto the fireman's seat and settled himself for the journey, elated at the idea that this time the "old Commy" would be often pushed to express speed.

The signal given, with bell ringing clamorously, the big engine started and soon was running full headway. To Jeffery it seemed that the great creature was rejoicing in its lighter load and glorying in its speed as it dashed through the towns and more open country on its way. Several miles out of the city the train passed over a high stone viaduct near the foot of which stood a stone cotton-mill. Jeffery, peering from the cab window looked from his dizzy height down into the space below as the engine thundered over the great arches, crossed and, with full "exhaust" on for the increased grade, powerfully panted onwards. That spot was indelibly fixed on Jeffery's mind forever after.

Suddenly, as he was looking backwards at the valley just crossed, a short wild shriek for "down brakes" from the "Commonwealth's" whistle brought his gaze quickly back to the cab. He saw Cotton jump from his seat with pale, fixed face, push in the throttle, reverse the great lever and again open the throttle to its limit. The locomotive seemed to groan and totter as her cylinders strained with the tremendous back pressure of steam. Cold, not with fright, but with an awed curiosity, Jeffery, with starting eyes, followed the gaze of the engineer as he stared ahead.

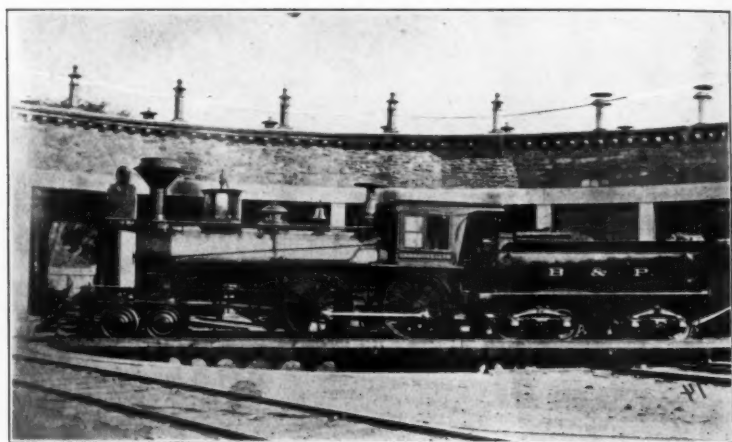
At first, from his side of the cab, there was apparently nothing to be seen but a clear track. A moment later from a siding suddenly the huge bulk of an immense engine loomed a few yards ahead directly in their path, backing down upon them. With bated breath and a strange sense of fascination, Jeffery clutched the back of the seat and stared at the oncoming engine. Suddenly it stopped, then quickly moved in the opposite direction and disappeared on the siding. The sharp clang of a turning switch, the grinding of tightening brakes, and, with a tremendous vibration as the engineer shut off steam, the "Commonwealth" came to a standstill just beyond the switch.

With a savage flash in his eye as he glanced at the other engineer, Cotton slammed forward the lever, pulled the throttle and again the "Commonwealth," with full "exhaust" roared and panted onwards within a few feet of the other engine, leaving behind them, as the train swept by, the faces of two men

blanched with fear, stupidly staring. Not a word was spoken; but the grim smile upon Cotton's face spoke volumes for the future of the other engineer, whose gross carelessness had threatened destruction to many souls.

The danger past, Jeffery was conscious of a hand upon his shoulder, and glancing upwards, met the gaze of Henry, who, with a slow wink of one eye and a momentary tightening of his grasp, turned back and then proceeded to stoke the fires vigorously. The rest of the journey passed uneventfully, and Jeffery felt nothing but exhilaration and a sense of enjoyment at having had a rare experience.

Later in the day Jeffery accompanied Henry to his home, was introduced to his wife, an austere-looking woman who greet-



THE "COMMONWEALTH"—B. & P., BUILDER.

ed him not unkindly but grimly, and soon ushered him into the rather funereal-looking "best chamber," with its mirror veiled in mosquito netting and a general air of gloom pervading it. The combination of the wife's solemn air and the dismal aspect of the room acted like a pall upon Jeffery's spirits, and a strange nervousness and dread oppressed the boy. At supper he had tried to stuff down some "aerated bread," an unpalatable compound which had been provided for him by his kind friend for a supposedly delicate digestion. When Henry's wife grimly declared that she suffered from "faint stomach," and had found the bread excellent for such conditions, Jeffery, smiling rather

wanly, swallowed his meal with difficulty, heartily wishing himself at home, unable, however, to understand his feeling of depression.

Henry, narrowly watching him, said later to his wife, "I am going to sleep in the same room with that boy; he's nervous after that narrow escape we had," and later, having seen Jeffery safely in bed, lay down by his side.

Jeffery, secure in the presence of his friend, soon fell asleep; but it was not long before a loud scream startled Henry from a doze into a bolt upright position, to see in the dimly lighted room the boy, terrified and panting, with staring eyes, and blanched face, standing beside him. Henry seized Jeffery in his arms firmly but gently, saying, "All right, all right, Jeffery. There's nothing there. Quiet, boy, quiet!" and gently holding him in his arms, with soothing words the man gradually quieted the poor lad until at last, sobbing but calmer, he lay down to fall again into a troubled sleep.

With sleepless eyes Henry lay watching the boy, who, from time to time, suddenly terrified by a vision of an immense locomotive bearing down crushingly upon him, would with a smothered scream convulsively cling to his friend, finally to be soothed and calmed until exhaustion brought relief in deep sleep until the morning. He awoke to see Henry gazing at him, his kind eyes filled with affectionate solicitude; and Jeffery, his heart filled with gratitude, flung his arms about his friend's neck, thanked him and said, "Oh, Martin, you're awfully good to me!" The man, deeply stirred, kissed the boy and said, huskily, "God bless you, Jeffery, my boy, my boy!"

A bright, cheerful morning found Jeffery again in his usual spirits, and apparently none the worse for his unpleasant experience of the preceding day and night. Bidding Mrs. Henry a polite but not wholly reluctant adieu, he proceeded gaily with his friend back to the railroad yard, to find Cotton already standing in the "Commonwealth," preparing for the return trip, which was made without special incident.

Once at home again, Jeffery had a fear lest his parents might forbid his daily visits to his friend because of the unusual experience of the day before. To his surprise and relief, however, after he had told of his escape, his father only said, "It has been a good thing for you, Jeffery. I know you will be careful not to run risks; but you are in good hands and I am not afraid for you." If the good mother had qualms as to the safety of her boy she bravely concealed them and rejoiced in his happiness.

Months went by. Jeffery made one or two subsequent visits to his friend's home, always to the gratification of Henry, who had learned to depend on his little friend's presence more than he knew at the time. Every day he watched for Jeffery's coming; and at times, when something unforeseen had possibly prevented the boy from making his usual visit, there was a feeling of loneliness in the man's heart that he could scarcely understand.

Time and circumstances, however, brought their inevitable changes. The day came when Jeffery found that other interests drew him away from the pleasurable excitement of his daily visits, and little by little some excuse was found for not going out to the "Commonwealth" as usual. With the happy thoughtlessness of youth, it never occurred to the boy that his apparent growing indifference was giving pain to his faithful friend, who was then learning one of life's hard experiences. The chance acquaintance of months before, and the affection which had sprung up between these two in consequence, was to deepen on the man's part into an intense protecting love of the boy, a love that was destined to tear his heart strings when the inevitable time of separation should come.

Finally came the day when Jeffery decided that he would not go out because of other more absorbing interests. Who shall condemn the lad who, in the heedlessness of youth, failed to frankly speak to his friend and tell him that he must cease making his daily visits? He allowed a few days to elapse and then wrote, "Dear Martin, I can't come out any more. Thank you. You have been very good to me. Jeffery."

No answer came; and the boy's conscience began to prick him. A day or two later, when returning from his school, he turned a corner near his home and came face to face with Henry, who, knowing the usual route the boy took, had evidently stationed himself there in order to speak to him. Henry came up immediately to Jeffery and said, "Jeffy, you wrote saying you couldn't come out any more."

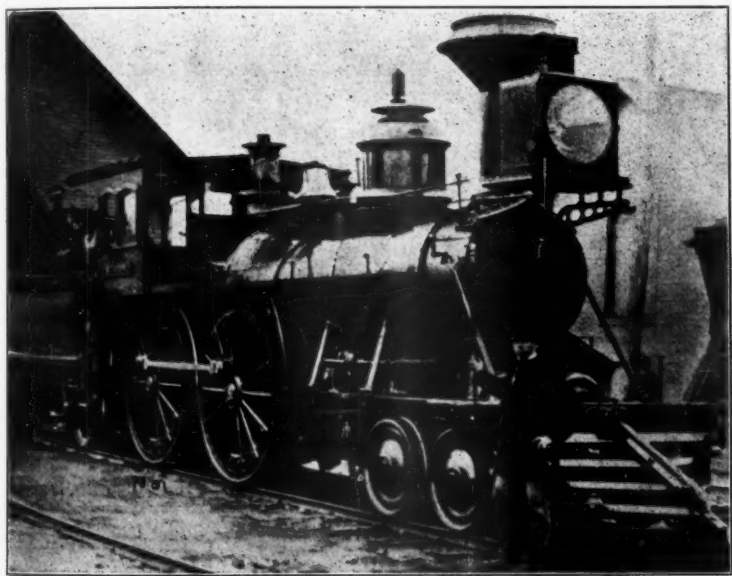
"Yes, Martin," said the boy, rather sadly, and with a sinking feeling at the heart, "I did."

The man looked hard at the boy for a moment, then said very quietly, quickly, with a slight hesitation, "All right;—be a good boy;—good-bye," and with a quick, strong clasp of Jeffery's hand, held tightly for a moment, he turned and walked rapidly away. That was all; but there was a look of acute pain, of wistful longing in the man's blue eyes that haunted Jeffery for days; and in after years, when life had taught him much,

he never recalled that look in his friend's eyes without a stab of pain and sorrow for the hurt which his thoughtlessness had given one who had loved him so well.

Years passed. Jeffery went to another school, then graduated from college, began the study of medicine, and after receiving his degree went abroad for two years and then returned to practise with his father.

Many changes had taken place near his home in the long interval since his school-days. A large passenger station had been built in the old freight yard, and new locomotives had taken the place of the old familiar one of his boyhood. The fancy seized him one day, not long after his return from abroad, to go to his former haunts to see if any of his friends were still



THE "SHARON"—LOWELL MACHINE SHOPS.

at their posts. Remembering the hour at which the "Commonwealth" used to start on its outward journey, Jeffery wandered across the railroad to the new freight yard. Seeing a new and large freight engine standing there, he approached it, and somewhat to his surprise saw that the engineer was Cotton, grown older and grayer, but with the same grave, rather grim,

but not unkind face that he remembered in his boyhood. Coming up to the engine he accosted the man and asked if he might enter.

Cotton failed at first to recognize the young man, whom he could only recall as a boy; but upon Jeffery's introducing himself again, Cotton's face relaxed, and with a pleasant greeting he asked Jeffery to enter the cab. In the fireman's seat sat another much younger man, an entire stranger; and as Jeffery glanced at him he felt a slight clutching at his heart with a choking sensation as he thought of the other who had occupied that same place in the "Commonwealth" years before.

"It seems a long time since you used to visit the old 'Commy.' She is only a 'spare engine' now," said Cotton. And then he began to ply Jeffery with questions about his life since boyhood, and recalled various incidents of the earlier time of their acquaintance.

Finally, Jeffery, with somewhat of an effort, said, "Where is Martin Henry now?" Cotton's face changed, and with a grim expression that Jeffery had often noticed and disliked in earlier days, said curtly, "Martin left the railroad some years ago. I believe he went to another railroad, but he's left that now. He began to drink and he didn't treat my sister right and she left him. I don't know where he is now and don't care!"

Like a flash Jeffery felt a burning resentment to the man rise in his breast, and a wave of loyal affection for his old friend swept over him, which for a moment deprived him of speech. Quickly past incidents came to his mind. He recalled the grim, dismal-looking wife who had ushered him into the funereal room upon his first visit to Henry's home. Coupled with this came the remembrance of his friend's many little kindly acts and tenderness to him as a boy. Then, with a stinging sense of his own curt unkindness in leaving Henry as he did, his heart went out in warmest sympathy and understanding to one who, perhaps in sorrow and loneliness, had given way to a besetting sin. With a tumult of emotions rushing through him, Jeffery's first impulse was to tell Cotton to his face what he thought of him and of his harsh judgment; but controlling himself with an effort, he only said quietly, "I am sorry. Martin was very good to me as a young boy and I can never forget his kindness." Soon afterwards he bade Cotton adieu and returned home feeling saddened and dissatisfied.

Increasing professional duties and cares began to absorb Jeffery and before long he was fully launched upon his medical

career, and gave little thought to the things which had so interested him as a boy. The subsequent death of his father and mother, with its attendant grief, took his thoughts in other directions. But one day, not long before leaving forever the home of his boyhood, his attention having been drawn to something connected with the railroad, a sudden impulse came over him to see if he could find a trace of his old friend.

He remembered that in earlier years Henry had told him he had lived in a town about twenty miles from Boston. He sat down at his table and wrote to the postmaster of the town asking for information of a certain Martin Henry who used to live there. In a few days came the reply, "Martin Henry is living here now."

Jeffery then wrote immediately:

"My dear Martin Henry:

"Many years ago when I was a little boy, you were very kind to me when I used to go out and ride on the 'Commonwealth' with you. I have never forgotten your kindness to me, and wish I could see you again. Will you not come to Boston some day to see me?"

"Always your friend,

"Jeffery Brandon."

A few days afterwards came a reply:

"My dear Friend:

"I have never forgotten you, but I thought you had forgotten me long ago. I should be glad to see you, and some day perhaps I can, but I am afraid I should not know you now."

"Yours respectfully,

"Martin Henry."

Several weeks after this, Jeffery, at the end of a hard day's work, was preparing to go out when the maid announced some one in the waiting room. Tired and rather irritable, he stepped quickly into the front room, and seeing a man, rather short, slightly bent, with grizzled gray hair, standing there, said, "Do you wish to see me medically, sir? My office hours are over and I am obliged to go out."

The man waited a moment, then said, "Is this Dr. Brandon?"

"Yes," answered Jeffery, rather curtly. "Do you wish to consult me?"

Again a slight pause, and again, "Is this Dr. Jeffery Brandon?"

"Yes," said Jeffery, at the same time noting the man's remarkable blue eyes, which seemed to stir some chord of memory in his mind.

Then very quietly came the words, "I am Martin Henry."

With a cry of surprise and pleasure Jeffery dropped his coat and physician's bag and rushed towards the old man, seized him by both hands, and shaking them heartily, exclaimed, "Oh, Martin, Martin, dear old friend, I am so glad to see you. Come right in. I have all the time in the world, and I want to see you."

Henry, pleased and smiling, looked into Jeffery's face keenly while holding his hands, and said, "I never should know you. Your hair is gray. Are you the little boy that used to come out to the old 'Commy'?" and he looked long and hard at Jeffery's face with the manner of an old man a little dazed with memories of earlier times.

"Yes, I am the same 'Jeffy.' And now come in and let me talk with you." And Jeffery led his friend back into his office and bade him sit down.

In the quiet of the late afternoon, under the warming influence of Jeffery's cordial greeting, the old man gradually relaxed and quietly told of his life after he had left the railroad. Slowly, and with touching humility, he spoke of the facts which led to his discharge. In times of unhappiness he had given way to a craving for drink; then came a narrow escape from a fearful accident when under the influence of liquor; his disgrace and discharge from the railroad; his subsequent wretchedness and endeavor to redeem himself. Of his wife's desertion when he was miserable and unhappy he said but little, and with no intimation of blame for her action.

As Jeffery listened his heart smote him as he recalled Henry's watchful care and love of him as a boy; the look of pain in the man's eyes as they parted years before. With a wave of tender sympathy passing over him, Jeffery said, "Martin, dear old friend, I have never told you how sorry I was I went away from you so suddenly. I was a boy and didn't realize that I was hurting you. But it's all right now, isn't it?"

Henry looked at him fixedly and said, "You didn't know how I felt then. I loved you better than anything in the world, and it about broke my heart, Jeffy,—but I mustn't call you that

now, for you are a famous doctor," he added half jestingly.

"Indeed you'll call me 'Jeffy' while we both live, old friend," exclaimed the other with warmth.

The old man smiled and said, "Well, it's all right now," and then told of his return to his native town, and of his daughter's kindness in receiving him in her own home after her marriage.

A little more of reminiscence and Henry rose and said, "Now I must go. I am glad to have seen you again, and may God be with you. Good-bye." With a warm clasp of the hand and a cordial greeting from his friend he departed, and as Jeffery turned back to his office there were tears in his eyes and a choking in his throat of which he was not ashamed.

The following Christmas came a card to Jeffery with the inscription, "From your old friend" upon it, with Henry's initials written below. To this Jeffery responded, begging the old man to come again, and telling him of his pleasure at having seen him once more. No reply came to this; and the months and years slipped rapidly by without further communication between them, although Jeffery's mind, in his busy life, often reverted to former days, and always with the determination to again be in touch with his old friend.

One day, in his new home far from his former haunts, he wrote again; but no response came, and he began to wonder if all was well, and whether his letter had been received. After two or three weeks, as he sat in his office late one afternoon, a letter was brought to him addressed evidently in a woman's hand, the envelope bearing the postmark of a town not far from where Henry had formerly lived. With a strange sense of foreboding, Jeffery held the letter in his hand and gazed at the handwriting as if trying to read the contents of the letter, and yet reluctant to have the fear in his heart confirmed. For a few moments he sat silent. The soft, low ticking of an old clock was the only sound to be heard. He opened the letter, and read:

"My dear Sir:

"Your kind letter written to my father, Martin Henry, came three weeks ago, and I have been unable to answer it until now. My dear father died only a short time before. He had failed rapidly in the past year, and in the last weeks he was unable to leave his bed, and his mind wandered a great deal. He often has told me about you, and was so pleased and happy and proud after his last visit to you. I

thought it would interest you to know that in his wandering he often seemed to be talking with you as if you were a little boy, for his mind seemed to go back many years. The day he died we were standing near him, and we heard him talking to himself, and when I bent over him he smiled a little, and I heard him say, 'It's all right, Jeffy,—it's all right. Jeffy,—I want you to be a good man,' and then he gave a little sigh and was gone."

And in Jeffery's office, by the soft light of the lamp and the log fire, the figure of a man could be seen, with his head on his hands; and the surrounding stillness was broken only by the low ticking of the clock and the sound as of some one quietly weeping.

* * * * *

The flashing of many city lights, the roar of a rapid train rushing between confined walls of brick and stone, the restless movement of passengers approaching a great terminus, and suddenly through the din the strong, vibrant voice of Conductor York, "Back Bay," and the train stopped in the large, dismal station. The passenger, with a start as if awakened from a deep dream which had carried him far from present time and surroundings, hurriedly closed the book on his lap and quickly left the train.

"Good-night, Mr. York!"

"Good-night, good-night! Glad to have seen you again, sir!" And wending his way rapidly up the steep, gloomy staircase, through clouds of choking steam and smoke, amid a babel of hissing, thundering locomotives, rushing motor cabs and crashing electric cars, the passenger emerged upon the street above, and looking neither to right nor left, straightway plunged into the midst of the hurrying crowd and soon disappeared from view, lost in the rush and turmoil of a great city.—Reprinted from the *New England Magazine*, Dec. 1913.

* * * * *

"Weston Holme" is the *nom de plume* of Dr. Vincent Y. Bowditch, a member of this Society.

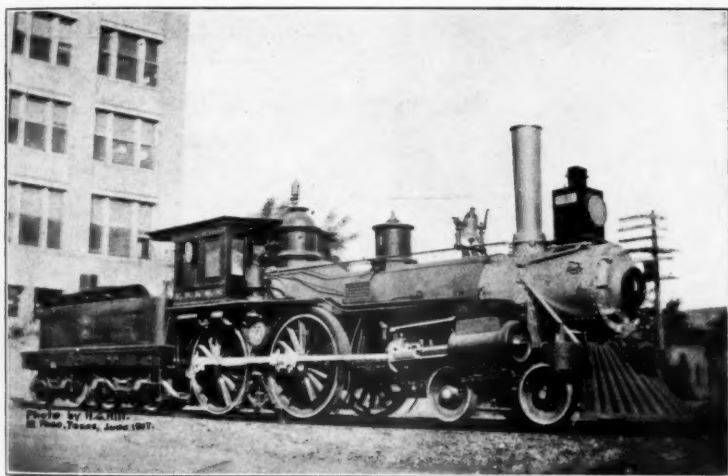
P. O. Box 871,
Port Arthur, Texas,
November 21, 1922.

MR. CHARLES E. FISHER, *President*,
The Railway and Locomotive Historical Society,
152 Harvard Street, Suite 8,
Brookline, Mass.

MY DEAR MR. FISHER,—

As a starter I am submitting the attached data which I hope will be of interest to the Society.

The locomotive is No. 1, of the El Paso & South Western Ry., which is on exhibition on the grass plot in the rear of the E. P. & S. W. General Office Building at El Paso, Texas. The small board on the running board gives the following data:



"First locomotive owned by the E. P. & S. W. Ry.
First locomotive to enter the city of Bisbee, Ariz."

The elaborate name plate located just under the air pump shows that Breese, Kneeland & Co., of Jersey City, N. J., built this locomotive in 1873. Among the interesting features of construction will be noted the inclined cylinders and built-up saddle; the reverse shaft located below the links; the extended

smoke-box and head-light bracket; the wheel guards, name plate and octagonal dome bases, which are suggestive of early practice. As built, this engine probably had only hand brakes on the tender, and still has wooden brake beams and hand wheel on tender. The drivers have been equipped with the old pull-up cam type driver brakes, while the air pump is the old 8" size, with the steam valve on the side of the steam cylinder. The bell stand is also interesting to note. No dimensions are available but it is believed that the cylinders are about 16"x24" and the drivers about 69" dia.

The enclosed photostat is a copy of a Boston paper, probably the Boston Globe, and was clipped from the paper by the late Dr. Edward H. Currier, of Manchester, N. H., who, with the writer's father, were ardent admirers of the "Old Timers" on the Boston & Maine. It is interesting to compare this old Bulletin with the Time Cards of the present day. It is easy to picture a train running over that line but hardly under those conditions. I have passed over that line many times, as I spent every summer of my boyhood on a farm at Bath, N. H., 4 miles from Woodsville, on the White Mountain Branch.

Very sincerely yours,

HOWARD G. HILL.

New York, December 2, 1922.

MR. HERBERT FISHER,
Box #426, Taunton, Massachusetts.

DEAR SIR:

In your Bulletin No. 3, which you were kind enough to send me, I find on page 29 a reference to the use of a container car.

I am, therefore, sending you an extract from the "Progressive Pennsylvania" describing the use of container cars as early as 1850.

With regards,

Yours truly,

H. M. SPERRY.

* * * As has already been stated, the main line of the Pennsylvania Canal included two railroads, which aggregated in length over one-fourth of the entire line. Most of the trans-

Regular Passenger Trains take precedence of all others.
Downward Trains entitled to the Road except when
otherwise directed in this Table.

Look out for Changes in Table.
JAMES M. WHITON, Sup't.

Notice respecting Cattle Trains.

JAMES M. WHITON, Sup't.

portation companies used both cars and boats, necessitating the handling of all freight when transferred from cars to boats or from boats to cars. From Philadelphia to Pittsburgh, or vice versa, this trans-shipment occurred three times, at Columbia, Hollidaysburg and Johnstown. But there were two transportation methods employed in carrying freight from one end of the main line to the other end without breaking bulk at any point.

The boats used by James O'Connor & Co. were hulls only, except that there was a cabin at the stern of each boat, the hulls being built of dimensions adapted to the reception of a fixed number of cars, or car bodies, which could be transferred from their trucks by windlasses that would lift them into the boats. In the same way the cars could be lifted out of the boats and placed upon trucks. The car-boats, as these boats were called, were abandoned before 1850. The other method referred to dispensed with cars entirely and embraced portable boats, divided into either three or four sections, each with the necessary bulkheads, and each being but little longer than an ordinary freight car of that day and of practically the same width. When in the water these sections would be united by appropriate side fastenings, making a complete boat, the bow and stern sections being rounded as in other boats. When taken from the water they were detached and deftly moved over trucks which had been run into the water upon a slightly inclined railroad track that was connected with the railroad over which the boat was to pass, a stationary engine pulling out the sections. When the boat would come to the end of its railroad journey it would be run into the water on its trucks and put together as we have described. The trucks were curved to fit the rounded bottoms of the boats. Several companies used these portable boats, which were continued in use long after 1850.—Extract from "Progressive Pennsylvania" by James M. Swank, in chapter entitled "The Pennsylvania Canal in Operation"; published at Philadelphia by J. B. Lippincott Company, 1908.

Some Notes Upon Early English Locomotives in America.

By G. W. BISHOP.

There is real railroad romance in the thought of antique locomotives facing the storms of ocean, to continue their career on the other side of the Atlantic. Although we cannot lay rails between England and the United States, the locomotive is not to be beaten, but will take to a "life on the ocean wave" rather than be confined to any particular country.

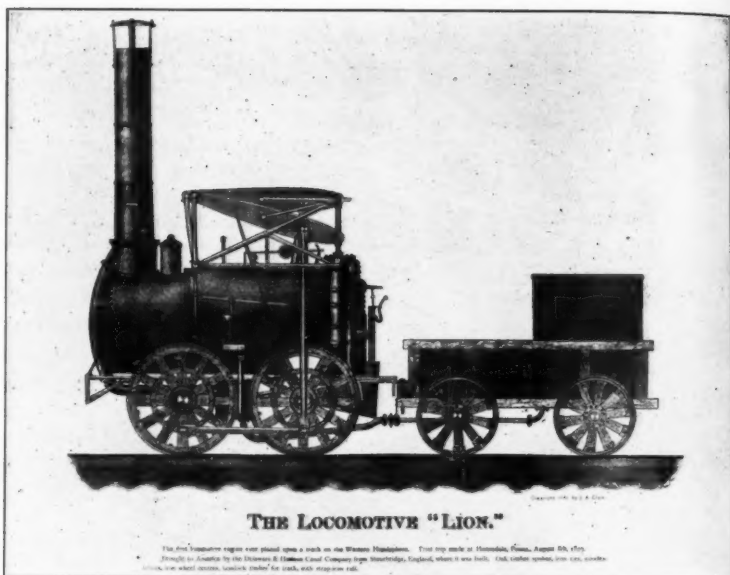
These notes might be called "Some Locomotive Mysteries," so far as the Old World is concerned. If they are a series of queries, it is because they are intended as an invitation to American railway students to reveal what they know upon the subject, and thus add to a fascinating aspect of locomotive history.

That sturdy old classic, C. E. Stretton's "Development of the Locomotive," gives some tantalising hints about these locomotive emigrants that "went West," as one may say, when railways were in their infancy. The examples may be set out in tabular form, thus:

<i>Name.</i>	<i>Type.</i>	<i>Date.</i>	<i>Builders.</i>
America.	0-4-0	1828	Robt. Stephenson & Co.
Stourbridge Lion	0-4-0	1828	Foster, Rastrick & Co.
John Bull (1).	?	1831	Robt. Stephenson & Co.
John Bull (2)	?	1831	Robt. Stephenson & Co.
Liverpool.	0-4-0	1831	Ed. Bury, Liverpool.
Edgefield.	0-4-0	1833	Robt. Stephenson & Co.
Brother Jonathan	?	1833	Robt. Stephenson & Co.
?	4-2-0	1833	Robt. Stephenson & Co.

It is gratifying to see the famous name of Stephenson figuring so prominently in the list of builders. Their Newcastle works being on the east side of England, the exported engines would either have to travel around Scotland or the Channel, or be taken across by land to a Western port.

Foster, Rastrick and Co. seem to have taken up locomotive building early in the Midland, at Stourbridge, close to the "Black Country." The "Stourbridge Lion" was similar to the "Agenoria," the first engine to run in the Midlands, which is preserved at South Kensington Museum. Probably the Stourbridge engine would travel to the coast by canal.



Edward Bury was a famous pioneer. He became locomotive superintendent of the London and Birmingham Railway, and stubbornly upheld the claims of four-wheeled engines, against the irresistible advance of the six-wheeled type. Another link he had with America was the great controversy concerning the Birmingham and Gloucester engines, built by Norris and Co., of Philadelphia. Mr. Bury sent a London and Birmingham engine, bearing his own name, to challenge the Americans on the Lickey incline, but it failed to surmount that fearsome gradient. (It is interesting to observe that the Lickey engines were the same type—4-2-0—as the Stephenson engine sent to America in 1833).

So far, so good. But how many details there are, that cannot be given! Such a host of questions spring up. What vessels were these veterans loaded upon? Were they complete or in sections? Were any difficulties met with on the voyages? How did they travel from the American coast to the lines they were intended for? And so on. The full story of their adventures, by land and sea, would form a singular chapter, if it could be told.

I had hoped to have included some illustrations, but have not succeeded in obtaining any. Let us hope that American students may be able to produce some pictures of these engines, and thus fill the gap. Meanwhile, I shall continue to look out for specimens on the English side.

Here is a table showing the railroads for which the engines were intended, giving the name of engine and railroad:

"America", Delaware and Hudson Canal Company.
"Stourbridge Lion," Delaware and Hudson Canal Company.
"John Bull (1)," Camden and Amboy R. R.
"John Bull (2)," Mohawk and Hudson R. R.
"Liverpool," Petersburg R. R.
"Edgefield," South Carolina R. R.
"Brother Jonathan," Hudson and Mohawk R. R.
? (4-2-0), Saratoga and Schenectady R. R.

This is unfamiliar ground for the writer, and ground where the R. & L. H. S. should be of great assistance.

Observe the distinction between the "Mohawk and Hudson" and "Hudson and Mohawk." Is it just a slight variation, or were they different lines?

The title "South Carolina" calls to mind some quaint little pictures in the "Pall Mall Magazine" many years ago. One shows "The First Train on the South Carolina R. R.," a 0-4-0 engine with vertical boiler, pulling a wagon carrying four soldiers, a cannon, and the American flag, followed by a passenger car. On the cylinder are the words "Best Friend." (I have an account of a somewhat similar "Best Friend," built for the Charleston and Hamburg R. R., 1830). One wonders whether the former engine worked together with the little "Edgefield," that hailed from Newcastle.

It seems fitting to include two Great Western engines which made trips to America, but did not settle there.

The famous "North Star" (2-2-2 type, Robt. Stephenson & Co., 1837) was built for an American line of 6 ft. gauge. (More queries—where was this railroad, and how long did the 6 ft. gauge survive?). She duly reached New York, but delivery was cancelled, and it is said the engine remained on the vessel, in New York Harbor, nearly six weeks! A unique incident, one would think.

After returning to Swindon, she was altered to Brunel's 7 ft. gauge. Later, she was preserved at Swindon for many years, and then, unfortunately, was broken up.

The "Lord of the Isles" (4-2-2 type, built 1851) after being exhibited at Hyde Park (1851) and Edinburgh (1890) was sent to Chicago for the Exposition of 1893. This engine ran the first G. W. R. train to Birmingham in 1852—a reminder of Brunel's dreams of a Broad Gauge route to the North. Afterwards she suffered the same fate as the "North Star."

It is well known, I think, that Mr. Webb's compound, "Queen Empress," also visited Chicago in 1893, but she was not exactly an "early" type. Still, the full story of their trip upon American tracks would be very interesting.

I hope that some R. & L. H. S. member will deal with this, and also give us an article on "American Locomotives that Came to England." This should open up additional fields of discussion.

G. W. BISHOP.

57 Warwick Road, Kenilworth, England.

IN MEMORY OF
ARCHIE GILFILLAN

1441 PAGE ST.
SAN FRANCISCO, CAL.
WHO DIED IN FEBRUARY, 1922.

Locomotives Built by the Amoskeag Mfg. Co.

MANCHESTER, NEW HAMPSHIRE.

- #1 Northern R. R., "Etna", May, 1849.
- 2 Concord R. R., "Gen. Stark", June 1849.
- 3 Manchester & Lawrence R. R., "Washington", Dec. 1849.
- 4 Manchester & Lawrence R. R., "Rob Roy", Jan. 1850.
- 5 Manchester & Lawrence R. R., "Londonderry", Jan. 1850.
- 6 Manchester & Lawrence R. R., "Marmeluke", 1850. Inside and outside connected. A failure!
- 7 Northern R. R., "Wm. Amory", June 1850.
- 8 Concord & Claremont R. R., "Claremont", Sept. 1850.
- 9 Vermont Central R. R., "Canada", Sept. 1850.
- 10 Vermont Central R. R., "Ottawa", Jan. 1851.
- 11 Vermont Central R. R., "Ontario", Feb. 14, 1851.
- 12 Vermont Central R. R., "Express", Feb. 27, 1851.
- 13 New York & Erie R. R., #125, May 1851.
- 14 New York & Erie R. R., #126, May 28, 1851.
- 15 Northern R. R., "Northern", June 18, 1851.
- 16 Ogdensburg R. R., "Sorel", Apr. 10, 1851.
- 17 Michigan Central R. R., "Bald Eagle", July 21, 1851.
- 18 Michigan Central R. R., "White Eagle", Aug. 1, 1851.
- 19 Passumpsic R. R., "Addison Gilmore", Sept. 30, 1851.
- 20 Passumpsic R. R., "Concord", Jan. 19, 1852.
- 21 Michigan Southern R. R., "E. C. Litchfield", June 14, 1851.
- 22 Michigan Southern R. R., "John Stryker", June 11, 1851.
- 23 Michigan Southern R. R., "John B. Jervis", July 15, 1851.
- 24 Michigan Southern R. R., "Charles Butler", July 29, 1851.
- 25 Buffalo & State Line R. R., "Manchester", Nov. 12, 1851.
- 26 Buffalo & State Line R. R., "Amoskeag", Dec. 20, 1851.
- 27 Michigan Central R. R., "Gray Eagle", May 26, 1851.
- 28 Michigan Central R. R., "American Eagle", Sept. 16, 1851.
- 29 Chicago & Galena R. R., "Winnebago", Sept. 16, 1851.
- 30 Michigan Southern R. R., "Gen. Bliss", Dec. 3, 1851.
- 31 Michigan Southern R. R., "Charles Noble", Dec. 3, 1851.
- 32 Buffalo & State Line R. R., "Concord", Feb. 19, 1852.
- 33 Buffalo & State Line R. R., "Stark", Feb. 19, 1852.
- 34 Rochester & Syracuse R. R., "Auburn", Nov. 3, 1851.
- 35 Rochester & Syracuse R. R., "Rochester", Nov. 24, 1851.
- 36 Michigan Central R. R., "Black Eagle", Apr. 1, 1852.
- 37 Michigan Central R. R., "Golden Eagle", Apr. 5, 1852.
- 38 Michigan Southern R. R., "Ohio", Apr. 4, 1852.

- 39 Michigan Southern R. R., "Indiana", Apr. 12, 1852.
- 40 Michigan Southern R. R., "Michigan", May 10, 1852.
- 41 Michigan Southern R. R., "Illinois", May 10, 1852.
- 42 Michigan Southern R. R., "Wisconsin", May 24, 1852.
- 43 Michigan Southern R. R., "Iowa", May 24, 1852.
- 44 Nashua & Lowell R. R., "Daniel Abbott", Mar. 20, 1852.
- 45 Buffalo & State Line R. R., "Hercules", June 2, 1852.
- 46 Michigan Southern R. R., "Beaver Oak", July 7, 1852.
- 47 Michigan Southern R. R., "White Pidgeon", July 22, 1852.
- 48 Michigan Southern R. R., "Gov. Barry", Aug. 3, 1852.
- 49 Michigan Southern R. R., "Osseo", 1852.
- 50 Rutland & Burlington R. R., "Nathan Rice", June 22, 1852.
- 51 Rutland & Burlington R. R., "John Howe", Aug. 3, 1852.
- 52 Northern R. R., "Gen. Peirce", Nov. 24, 1852.
- 53 Vermont Central R. R., "El Dorado", July 6, 1852.
- 54 Rutland & Washington R. R., "Timothy F. Strong", July 22, 1852.
- 55 Michigan Southern R. R., "Constantine", Oct. 4, 1852.
- 56 Michigan Central R. R., "White Cloud", Oct. 20, 1852.
- 57 Michigan Central R. R., "Flying Cloud", Oct. 4, 1852.
- 58 Montreal & New York R. R., July 12, 1852.
- 59 Montreal & New York R. R., "New York", Aug. 25, 1852.
- 60 Western Atlantic R. R., "New Hampshire", Oct. 20, 1852.
- 61 Plattsburg & Montreal R. R., "Clinton", Dec. 27, 1852.
- 62 St. Lawrence & Atlantic R. R., "Caticook", Dec. 7, 1852.
- 63 St. Lawrence & Atlantic R. R., "Nulhegan", Dec. 28, 1852.
- 64 St. Lawrence & Atlantic R. R.
- 65 St. Lawrence & Atlantic R. R.
- 66 St. Lawrence & Atlantic R. R.
- 67 St. Lawrence & Atlantic R. R.
- 68 St. Lawrence & Atlantic R. R., "Prince Albert", Dec. 6, 1852.
- 69 Androscoggin R. R., "Leeds", Oct. 21, 1852.
- 70 Androscoggin R. R., "Livermore", Nov. 29, 1852.
- 71 Contoocook Valley R. R., "Hillsboro", Oct. 7, 1852.
- 72 Rutland & Burlington R. R., "Timothy Follette", Jan. 11, 1853.
- 73 Rutland & Burlington R. R., "Samuel Henshaw", March, 1853.
- 74 Hudson River R. R., "Manchester", Dec. 21, 1852.
- 75 Hudson River R. R., "Amoskeag", Jan. 1, 1853.
- 76 Northern R. R., "Daniel Webster", Feb. 7, 1853.
- 77 Housatonic R. R., "Pittsfield", Dec. 22, 1852.
- 78 Indiana & Bellfontaine R. R., "A. N. Morris", March, 1853.

- 79 Indiana & Bellfontaine R. R., "Cleveland", June 13, 1853.
- 80 Housatonic R. R., "Taghconic", Feb. 16, 1853.
- 81 New York ?, Jan. 21, 1853.
- 82 New York ?, Jan. 21, 1853.
- 83 Military Co., "Antelope", ?.
- 84 Military Co., "Reindeer", ?.
- 85 Military Co., "Panther", ?.
- 86 Military Co., "Gazelle", ?.
- 87 Military Co., "Roebuck", ?.
- 88 Military Co., ?, ?.
- 89 Michigan Southern R. R., "Lion", Apr. 18, 1853.
- 90 Michigan Southern R. R., "Elk", May 5, 1853.
- 91 Michigan Southern R. R., "Zebra", May 16, 1853.
- 92 Boston & Maine R. R., "O. W. Bailey", Apr. 4, 1853.
- 93 Boston & Maine R. R., "Lion", Apr. 26, 1853.
- 94 Aurora Branch R. R., ?, 1853.
- 95 Aurora Branch R. R., ?, 1853.
- 96 Aurora Branch R. R., "Lasselle", 1853.
- 97 Aurora Branch R. R., "Batavia", 1853.
- 98 Aurora Branch R. R., "Aurora", 1853.
- 99 Aurora Branch R. R., "Little Indian", 1853.
- 100 Aurora Branch R. R., "Little Rock", 1853.
- 101 Aurora Branch R. R., "Big Indian", 1853.
- 102 Aurora Branch R. R., "Big Rock", 1853.
- 103 Aurora Branch R. R., ?, 1853.
- 104 Junction R. R., "Cayahoga", May 5, 1853.
- 105 Junction R. R., "Lorraine", May 5, 1853.
- 106 Junction R. R., "Erie", August, 1853.
- 107 Junction R. R., "Ottawa", 1853.
- 108 Junction R. R., "Vermillion", 1853.
- 109 Junction R. R., "Clinton", 1853.
- 110 Concord R. R., "Thornton", Aug. 30, 1853.
- 118 Boston & Maine R. R., "Rockingham", July 25, 1853.
- 119 Kennebec & Portland R. R., "Hallowell", Feb. 10, 1853.
- 120 Kennebec & Portland R. R., "Ajax", March 24, 1853.
- 122 Kennebec & Portland R. R., "Atlas", 1853.
- 139 Old Colony R. R., "Pilgrim", Dec. 27, 1853.
- 167 Concord R. R., "Blodgett", June 12, 1853.
- 168 Concord R. R., "Isaac Spaulding", June 12, 1853.

List furnished by M. Benj. Thomas. Numbers omitted were built for roads outside of New England.